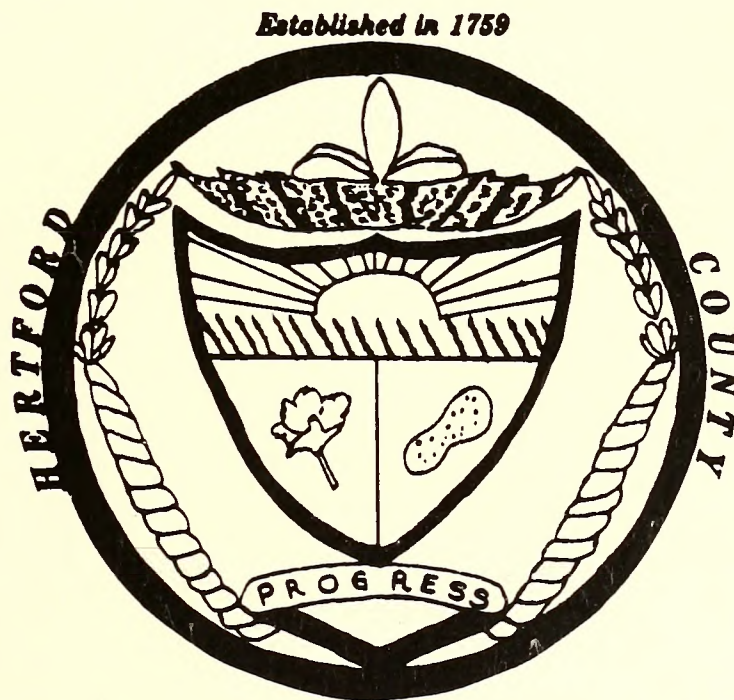


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North Carolina Department of Transportation
Statewide Planning Branch
Small Urban Planning Unit

THOROUGHFARE PLAN
FOR
HERTFORD COUNTY



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THOROUGHFARE PLAN
FOR
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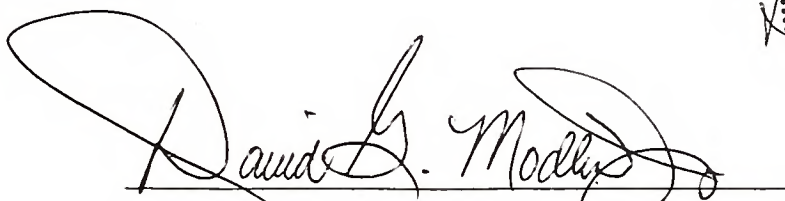
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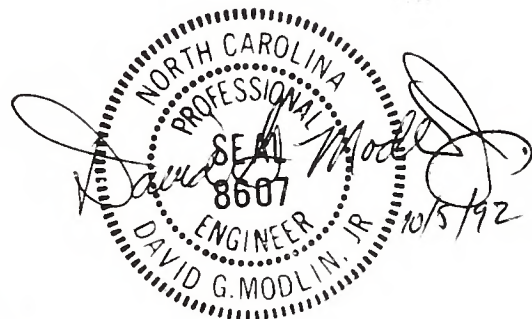
Statewide Planning Branch
Division of Highways
N. C. Department of Transportation


In cooperation with:

The County of Hertford
The Federal Highway Administration
U. S. Department of Transportation

August, 1992


David G. Modlin, Jr., Ph.D., P.E.
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I. INTRODUCTION

The economic growth of a region is largely dependant on how efficiently the transportation system handles travel demands. Unless people and goods are able to move from one place to another quickly and conveniently, the area stagnates and fails to reach its full potential. Therefore, it is essential to develop a thoroughfare system which can efficiently handle present and anticipated traffic needs. This report will set forth a system of roadway improvements that will accommodate Hertford County's needs into the twenty-first century.

Hertford County has not experienced significant growth since 1970 and therefore its existing road system does not require drastic changes. The changes that are proposed will make travel along major highways easier, faster, and more direct. Also by widening many of the roads, travel throughout the County will be safer.

The proposed system of thoroughfares was developed following the basic principles of thoroughfare planning as described in Chapter II of this report. Major thoroughfares were located based upon existing and anticipated land development, topographic conditions, and field investigations. The plan advocates those improvements which are felt to be essential for proper traffic circulation within the current planning period (1990-2020).

Improvements proposed in the county plan will be primarily the responsibility of the North Carolina Department of Transportation. However, Hertford County can provide assistance in the implementation of the plan through subdivision regulations and zoning ordinances. Thus the plan should be formally approved by the Hertford County Commissioners and the Department of Transportation to serve as a mutual official guide in the development of the thoroughfare system.

II. COUNTY THOROUGHFARE PLANNING PRINCIPLES

Purpose of Planning

There are many benefits to be gained from thoroughfare planning, but the main objective is to assure that the road system will be progressively developed to serve future travel desires adequately. Thus, the main consideration in thoroughfare planning is to make provisions for street and highway improvements so that, when the need arises, feasible opportunities to make improvements exist.

Streets, roads, and highways have two primary functions: they provide traffic service and land service. When combined, these two services are basically incompatible. This conflict will not be serious if both traffic and land service demands are low. However, when traffic volumes are high, access conflicts created by uncontrolled and intensely used abutting property result in intolerable traffic flow friction and congestion.

There are two major benefits derived from thoroughfare planning. First, each road or highway can be designed to perform a specific function and provide a specific level of service. This permits savings in right-of-way, construction, and maintenance costs. It also protects residential neighborhoods and encourages stability in travel and land use patterns. Second, local officials are informed of future improvements and can incorporate them into planning and policy decisions. This will permit developers to design subdivisions in a non-conflicting manner, direct school and park officials to better locate their facilities, and minimize the damage to property values and community appearance that is sometimes associated with road improvements.

County Thoroughfare Planning Concept

The underlying concept of the thoroughfare plan is to provide a functional system of streets, roads, and highways that permit direct, efficient, and safe travel. Different elements in the system are designed to have specific functions and levels of service, thus minimizing the traffic and land service conflict.

In the county plan, elements are designated as either urban or rural. In the urban planning area, the local municipality generally has planning jurisdiction. Outside the urban planning area, the county has planning jurisdiction. In those urban areas where no urban thoroughfare plan has been developed, elements are generally designated as rural and under the planning jurisdiction of the county. When a thoroughfare plan is developed for an urban area that has not previously had a plan, then the area

defined by that plan is considered to be urban and comes under the planning jurisdiction of the municipality.

Within the urban and rural systems, thoroughfare plan elements are classified according to the specific function they are to perform. A discussion of the elements and functions of the two systems follows.

Urban Thoroughfare Classification System

In the urban thoroughfare plan, elements are classified as major thoroughfares, minor thoroughfares and local access streets. The major thoroughfares are the primary traffic arteries of the urban area providing for traffic movements within, around, and through the area. Minor thoroughfares are designed to collect traffic from the local access streets and carry it to the major thoroughfare system. Local access streets, which may be further classified as residential, commercial, or industrial streets, are designed only to provide access to abutting property. Due to the limited amount of detail that can be shown on a county thoroughfare plan, only urban major thoroughfares are shown.

The coordinated system of major thoroughfares that is most adaptable to the desired lines of travel within an urban area and which is reflected in most urban area thoroughfare plans is the radial-loop system. The radial-loop system includes radials, crosstowns, loops, and bypasses. Radial thoroughfares provide for travel from points outside to major destinations inside the urban area. Crosstown thoroughfares provide for traffic movement across the central area and around the central business district (CBD). Loop thoroughfares provide for lateral travel movements between suburban areas. Bypasses are designed to carry non-local traffic around and through the area. Occasionally, a bypass with low through traffic volumes can be designed to function as a portion of the urban loop. Figure 1 illustrates the concepts of the radial-loop major thoroughfare system and the functionally classified urban street system.

Rural Thoroughfare Classification System

The rural system consists of those facilities outside the urban thoroughfare planning boundaries. They are classified into four major systems: principal arterials, minor arterials, major and minor collectors, and local roads. Table 1 indicates generally accepted statewide mileage on these systems.

IDEALIZED THOROUGHFARE PLAN

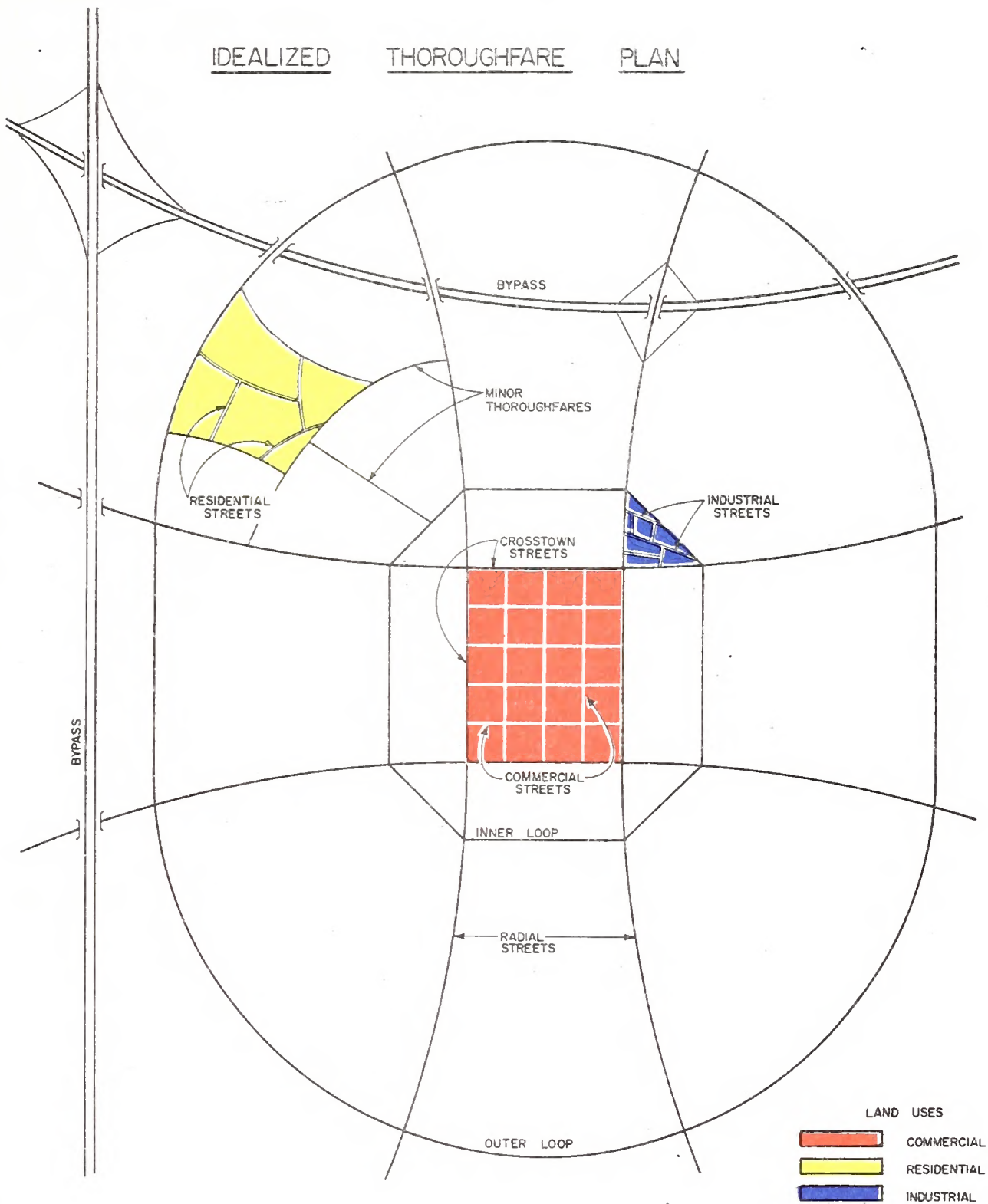


FIGURE 1

TABLE 1

Rural System Road Mileage Distribution

Systems	Percentage of Total Rural Miles
Principal Arterial System	2-4
Principal Arterial System plus Minor Arterial Road System	6-12
Collector (Major and Minor) Road System	20-25
Local Road System	65-75

Rural Principal Arterial System: This system consists of a connected network of continuous routes that serve corridor movements having substantial statewide or interstate travel characteristics. This will be indicated by both the trip lengths and the travel densities. The principal arterial system should serve all urban areas of over 50,000 population and a majority of those with a population greater than 5,000. The Interstate System constitutes a significant portion of the principal arterial system.

Rural Minor Arterial System: This system, in conjunction with the principal arterial system, forms a network that links cities, larger towns, and other major traffic generators such as large resorts. The minor arterial system generally serves intrastate and intercounty travel and travel corridors with trip lengths and travel densities somewhat less than the principal arterial system.

Rural Collector Road System: The rural collector routes generally serve intracounty travel rather than statewide travel. This system consists of those routes on which the predominant travel distances are shorter than on the arterial routes. The rural collector road system is subclassified into major and minor collector roads.

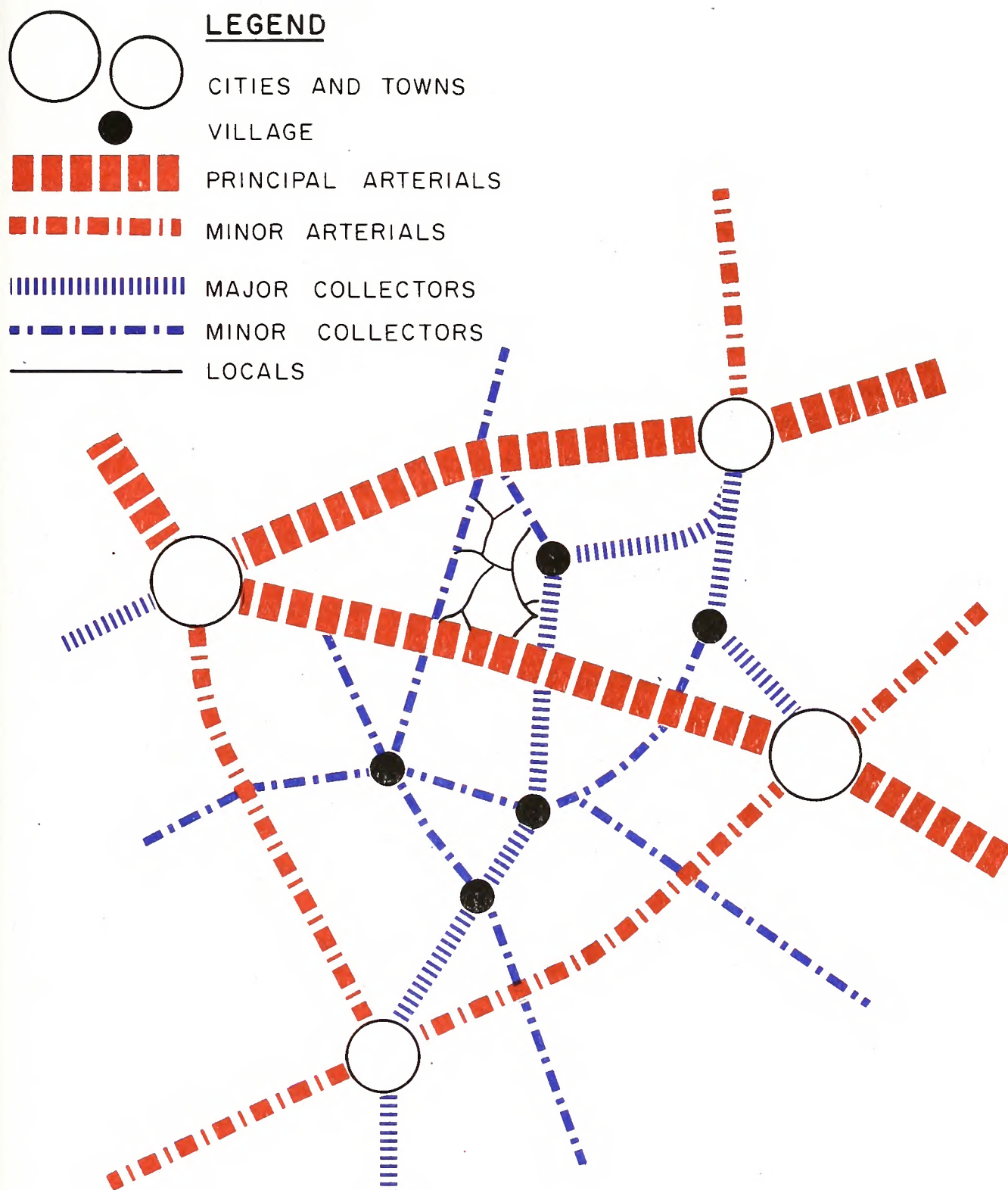
Major Collector Roads: These routes provide service to the larger towns not directly served by the higher systems and to other traffic generators of equivalent intracounty importance, such as consolidated schools, shipping points, county parks, significant mining and agricultural areas, etc. Major collector roads also link these places to routes of higher classification and serve the more important intracounty travel corridors.

Minor Collector Roads: These routes collect traffic from local roads and bring all developed areas within a reasonable distance of a major collector road; provide service to the remaining smaller communities; and link the locally important traffic generators with the rural outskirts.

Rural Local Road System: The local roads are comprised of all roads that are not on a higher system. Local residential subdivision streets and residential collector streets are elements of the local road system. Local residential streets are either cul-de-sacs, loop streets less than 2,500 feet in length, or streets less than one mile in length that do not connect thoroughfares or serve major traffic generators and do not collect traffic from more than one hundred dwelling units. Residential collector streets serve as the connecting street system between local residential streets and the thoroughfare system.

Figure 2 gives a schematic illustration of a functionally classified rural highway system.

FIGURE 2



SCHEMATIC ILLUSTRATION
OF FUNCTIONALLY CLASSIFIED
RURAL HIGHWAY NETWORK

III. URBAN THOROUGHFARE PLANS IN HERTFORD COUNTY

Thoroughfare plans are developed for urban areas and counties to assist officials in the development of the most logical and appropriate street system that will meet the existing and future travel demands. The municipalities and county must cooperate as a team to develop an efficient system for travel throughout the County.

A thoroughfare plan was developed for the urban area of Ahoskie in 1985. The plan was adopted by the Town of Ahoskie and the North Carolina Board of Transportation in 1985.

High priority was given to the following projects in Ahoskie:

1. US 13 Bypass from north of the US 13 intersection with Arrow Road (SR 1418) to south of the US 13 intersection with Brinkleyville Road (SR 1411);
2. Holloman Avenue Loop Extension from Cathrine Street to proposed Sunbeam Plant Road Extension;
3. Memorial Drive Extension to the proposed Holloman Avenue Loop;
4. Pembroke Avenue Extension to the proposed Holloman Avenue Loop;
5. Sunbeam Plant Road (SR 1105) Extension to US 13 and Boone Road;
6. McGlohon Street Extension to the proposed Holloman Avenue Loop;
7. Early Station Road (SR 1106) Extension to Boone Road; and
8. Lincoln Road (SR 1453) Extension to the proposed US 13 Bypass.

For further details and other plan considerations, refer to the Ahoskie Thoroughfare Plan Report, May 1985, North Carolina Department of Transportation

A thoroughfare plan was developed for the urban area of Murfreesboro in 1992. The plan was adopted by the Town of Murfreesboro and the North Carolina Board of Transportation in 1992.

High priority was given to the following projects in Murfreesboro:

1. US 158 Bypass from west of Murfreesboro connecting back to US 158 in the vicinity of Underwood Road (SR 1178), east of Murfreesboro;

2. US 258 Bypass from US 258 west of Murfreesboro connecting back to US 258 in the vicinity of Hill Ferry Road (SR 1309), northeast of Murfreesboro;
3. Straighten the dog-leg intersection of Main Street and Wise Store Road (SR 1300) and Storey Road (SR 1166);
4. Edgewood Drive Extention to US 158 Bypass; and
5. Swell Street Extention to connect to NC 11.

A thoroughfare plan was developed for the Village of Cofield in 1992. The plan was adopted by the Town of Cofield and the North Carolina Board of Transportation in 1992.

High priority was given to the widening of Ahoskie-Cofield Road (SR 1403) to a 34-foot curb-and-gutter section from its intersection with NC 45 to River Road (SR 1400).

Projects currently in the 1992-1998 Transportation Improvement Program for Hertford County are:

1. US 13, NC 42 to Winton Bypass. (11.2 miles)
Multi-lane Facility with a bypass of Ahoskie on new location;
2. US 13, SR 1457 south of Winton to the Virginia State line (17.5 Miles). Widen existing roadway to a multi-lane facility;
3. US 158, Murfreesboro Bypass. (5.0 miles)
Four-lane, divided facility on new location;
4. US 158, Murfreesboro Bypass to US 13. (8.3 miles)
Widen existing roadway to multi-lane facility; and
5. NC 11, NC 903 to US 13 Bypass north of Ahoskie.
Widen roadway to multi-lanes.

IV. HERTFORD COUNTY - POPULATION, LAND USE, TRAFFIC

Hertford County is located in the northeastern region of North Carolina, bounded by the Virginia State line to the north, Northhampton County to the west, Bertie County to the south, and Gates County and the Chowan River to the east (See Figure 3).

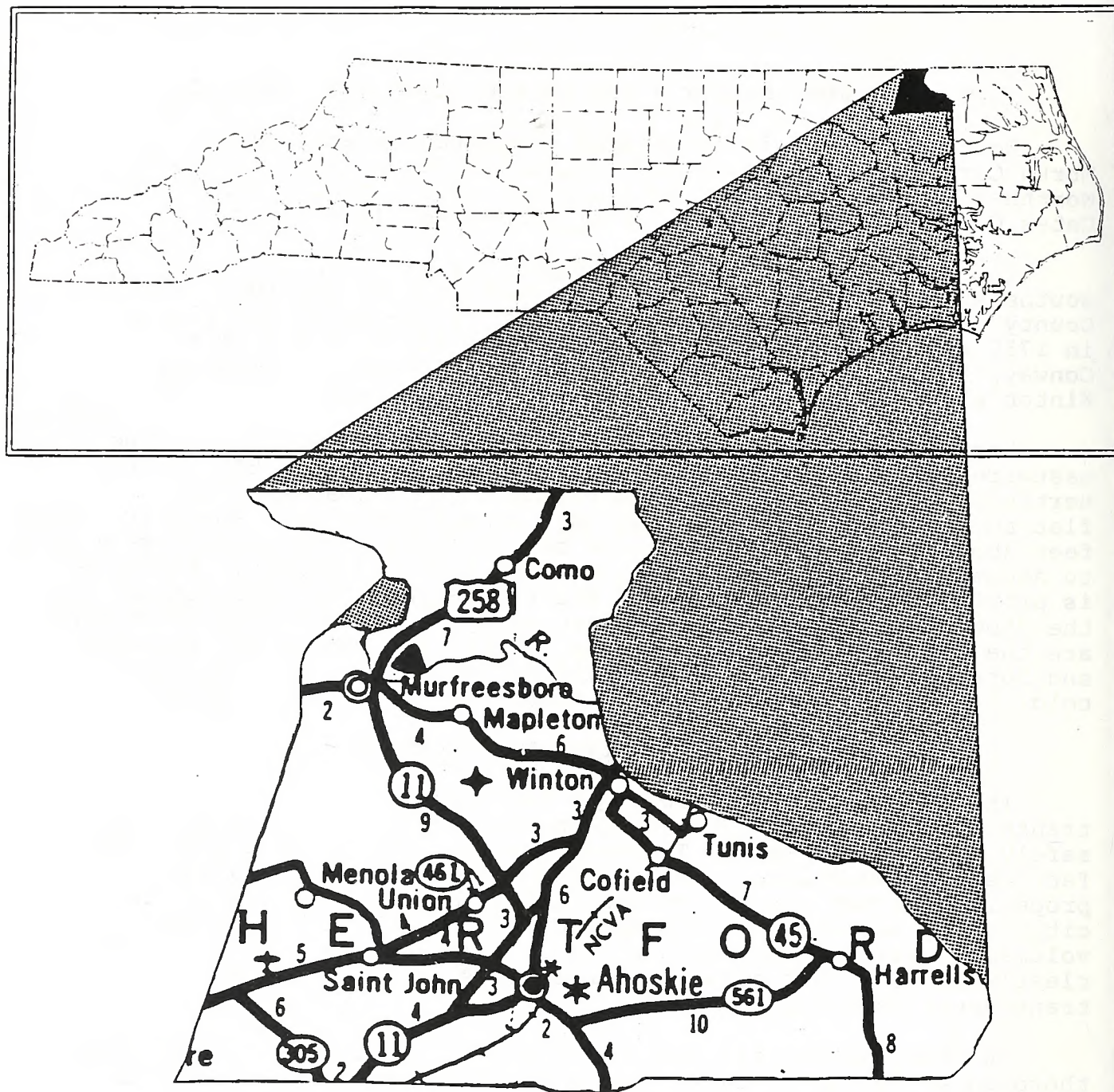
The County lies 55 miles southwest of Norfolk, 105 miles southeast of Richmond and 120 miles northeast of Raleigh. The County of Hertford was formed by an act of the state legislature in 1759 and named in honor of the Marquis of Hertford, Francis Conway, a distinguished member of the parliament and soldier. Winton was established as the county seat in 1766.

Hertford County is boot-like in shape with the toe pointing eastward and has a land area of 356 square miles (227,840 acres). Hertford County lies on North Carolina's inner coastal plain on flat to gently rolling terrain. Elevations range from about 10 feet above sea level on the broad bottom lands along major streams to about 95 feet in the western part of Hertford County. Drainage is provided by the Meherrin and Wiccacon Rivers, tributaries of the Chowan River. Major creeks and swamps in this drainage system are the Ahoskie, Bear, Cutawhiskie, Chinkapin, Deep Swamp Branch and Potecasi. The climate of Hertford County is temperate with cold, but not severe winters and moderately warm summers.

Factors Affecting Transportation

The objective of thoroughfare planning is to develop a transportation system which will enable people and goods to travel safely and economically. To determine the needs of a county, the factors of population, land use, and traffic must be examined. To properly plan for the transportation needs of both a county and a city, it is important to understand and describe the type and volume of travel which takes place in that area, and also to clearly identify the goals and objectives to be met by the transportation plan.

In order to fulfill the objectives of an adequate thirty year thoroughfare plan, reliable forecasts of future travel patterns must be achieved. Such forecasts are possible only when the following major items are carefully analyzed: (1) historic and potential population changes; (2) significant trends in the economy; (3) character and intensity of land development; and (4) motor vehicle registration and usage. Additional items that vary in influence include the effects of legal controls such as zoning ordinances and subdivision regulations, availability of public utilities and transportation facilities, and topographic and other physical features of the area.



GEOGRAPHIC LOCATION OF
HERTFORD COUNTY
NORTH CAROLINA

FIGURE 3

Population Trends

The volume of traffic on a section of roadway is a function of the size and location of the population it serves. An analysis of population is one of the first steps for transportation planners. The analysis of past trends allows the planner to estimate future population and traffic which it will generate with some degree of reliability.

Since 1970 the population of Hertford County has remained almost steady averaging a 0.41% decrease per year. Based on the trends from 1970 to 1990, the estimated population for the design year 2020 is 21,519 (See Table 2).

TABLE 2					
HERTFORD COUNTY POPULATION TRENDS					
1970	1980	1990	RATE %	2010	2020
24,439	23,368	22,523	-0.41%	21,891 *	21,519 *

* Estimated

Source: County and State Population Projection:
1991-2020, Office of State Budget Management

Land Use

The generation of traffic on a particular thoroughfare is very closely related to the use of adjacent land areas. Some type of land uses generate much more traffic than others. For example, a commercial or retail area such as a shopping center would generate or attract much larger volumes of traffic than would a residential area. The attraction between different land uses varies with the intensity of the development and the distance between those developed areas. Therefore, it becomes necessary to designate land uses by type for the purpose of transportation planning. An analysis of the distribution of existing land uses serves as a basis for forecasting future land use needs and the resulting travel patterns.

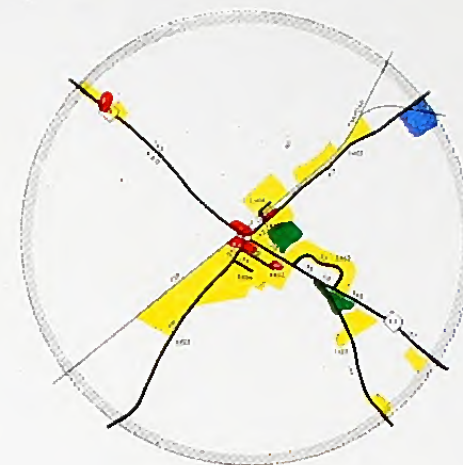
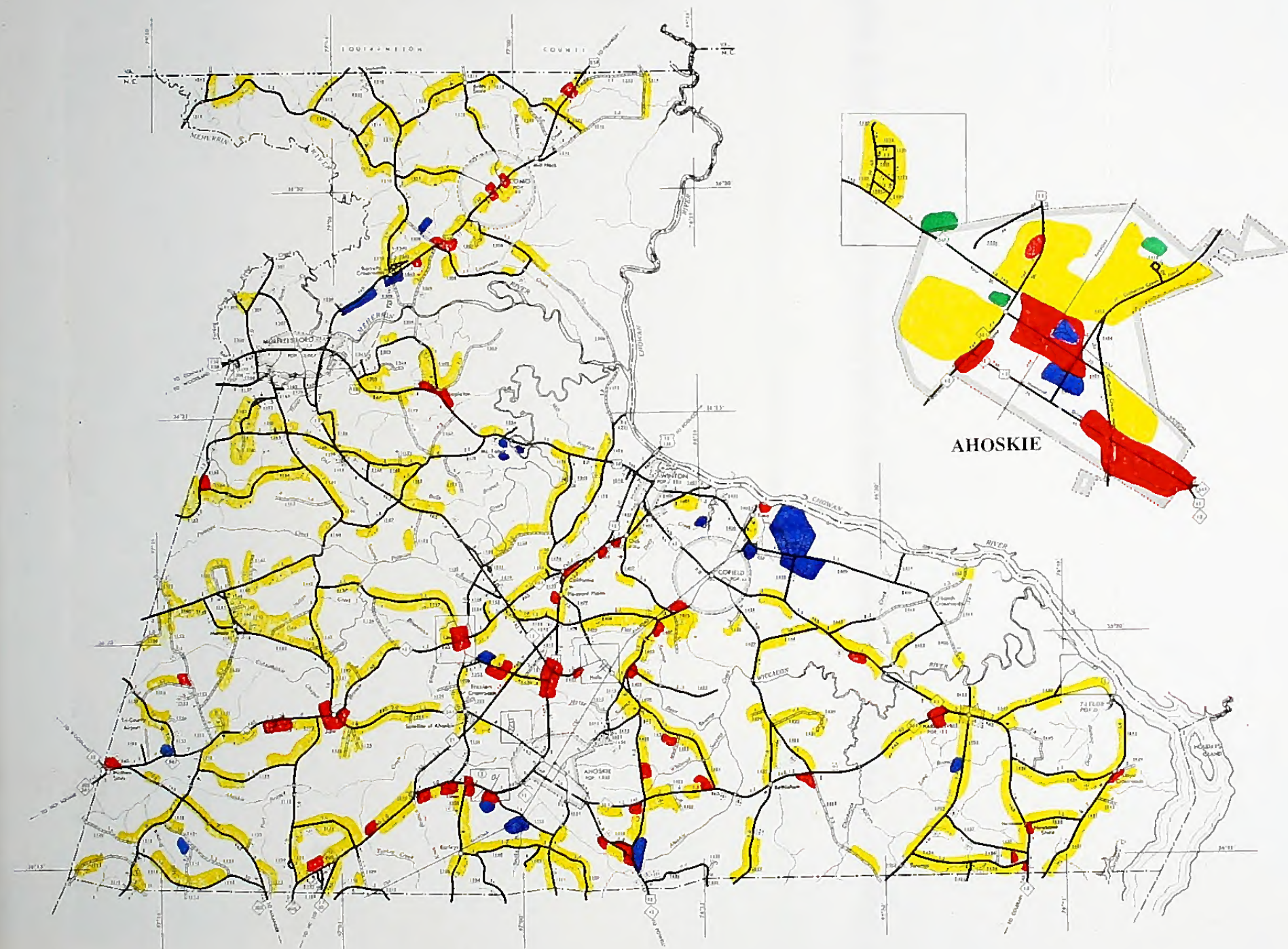
Hertford County is made up of 227,840 acres of land. Approximately 82,297 acres, or about 36% of the County is designated as prime farmland. These prime farmlands are found evenly throughout the County and are in use as cropland, pasture or woodland. Urban areas account for only 2.3% of the land acreage.

An investigation of the existing land use map shown on Figure 4, discloses that Hertford County's population is distributed

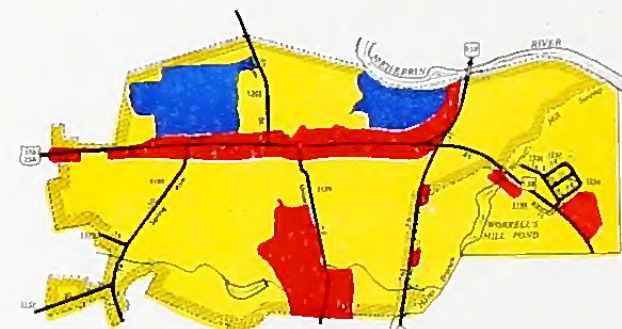
fairly evenly within the County and concentrated linearly along the transportation routes. This is the prevalent pattern throughout the County with the exception of some clustering near the population centers within the County. Most important retail centers are located in urban areas and along the more traveled routes such as US 13, US 258, NC 11, NC 42 and NC 561. Hertford County's principal types of industrial and commercial establishments are lumber, aluminum, apparel, plastic, printing, poultry processing, machine shops, health services, banking and insurance. The County's development patterns are such that no significant incompatibility problems are likely to occur.

Historic and Archaeological sites

Figure 5 shows the map of Hertford County with the known historically and architecturally significant structures identified. The properties identified with their names are already listed in the National Register of Historic Places. The properties identified with numbers are historically and architecturally important but are not listed in the National Register at this time. Care was taken to ensure that the Hertford County Thoroughfare Plan would not impact any of the historic structures in the County.



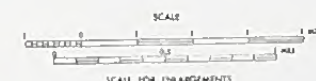
COFIELD



MUFREESBORO

HERTFORD COUNTY NORTH CAROLINA

PREPARED BY THE
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS—PLANNING AND RESEARCH BRANCH
IN COOPERATION WITH THE
U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION



LEGEND

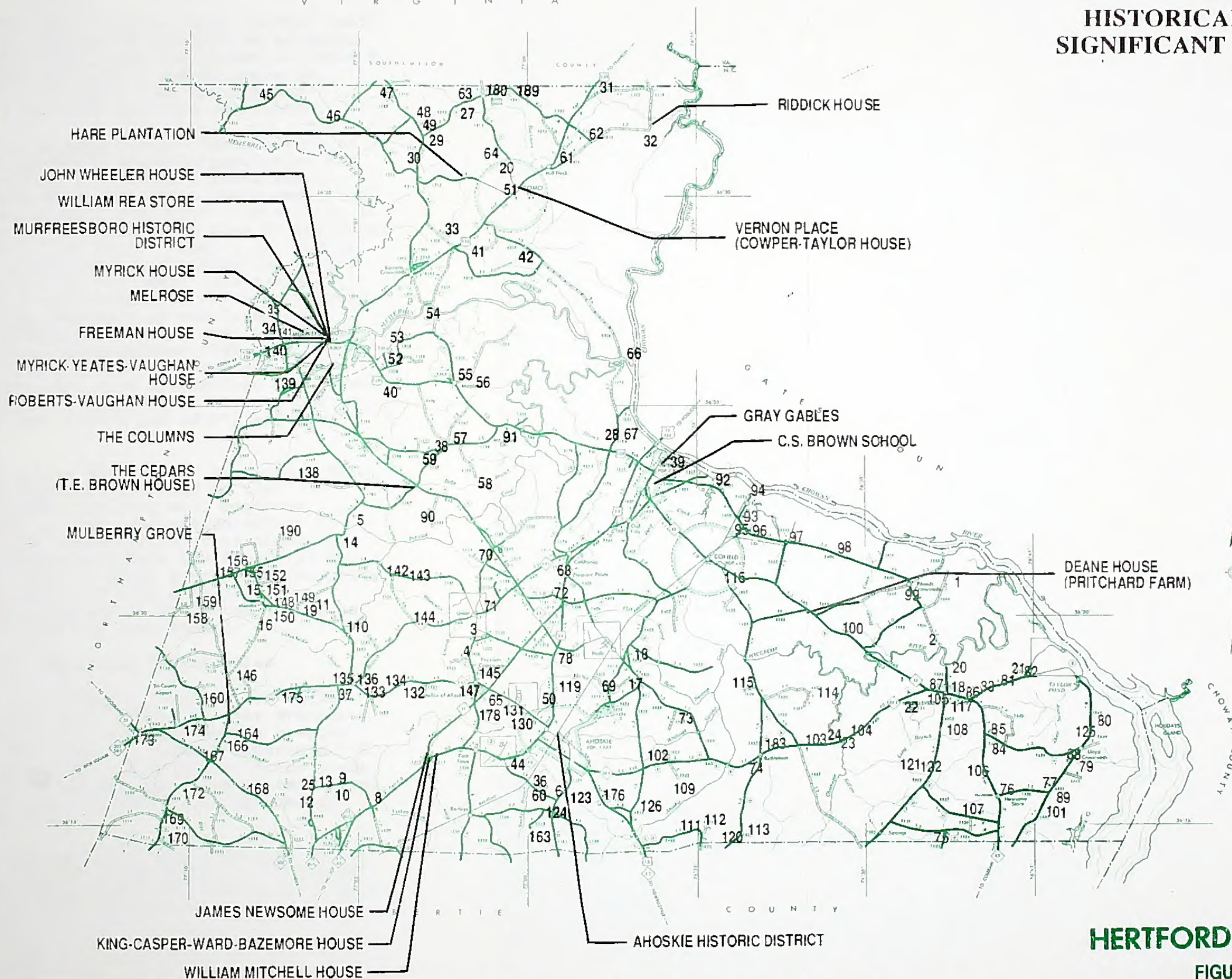
- RESIDENTIAL
- COMMERCIAL
- INDUSTRIAL
- PUBLIC/INSTITUTIONAL

LAND USE MAP

FIGURE 4

V I R G I N I A

HISTORICALLY SIGNIFICANT SITES



HERTFORD COUNTY

FIGURE 5

Traffic

A comparison of 1970, 1980, 1990 average daily traffic (ADT) volumes and projections for the years 2010 and 2020 on selected major roads and highways in Hertford County are listed in Table 5, assuming no changes to the existing highway system are made. These projections were based on historical and anticipated population and economic growth patterns and land use trends.

Vehicle registrations have increased at a moderate rate of about 1.8% per year. Although Hertford County's population has declined, the number of vehicles on the County's roads has increased. This increase can be shown best by a graph depicting the change in persons per vehicle ratio over time. This ratio is obtained by dividing the total population of the area by the total number of vehicles registered in that area. Graph 1 is used to show this comparison for North Carolina and Hertford County and includes projections to the year 2010 and 2020. The results illustrate the transition from a non-automobile oriented society to one whose vitality is heavily dependent on the automobile. This change in lifestyle has gradually occurred over many years, with the most dramatic difference being between 1960 and 1990. This change is primarily due to the transition from an agriculturally dominated society to a more diversified one (fewer people on the farm, greater need for transportation) and the availability of automobiles in the 1960's and 1970's and the banking credit to buy them.

Since the 1980's, though, these reasons for purchasing more automobiles have had less influence and have led to the expectation that the person-per-vehicle rate will begin to stabilize as projected in Graph 1. This saturation effect is expected to stabilize trip-making characteristics of middle and upper income families since they already have the financial means to purchase enough vehicles to satisfy their transportation needs. On the other hand, moderate growth in the trip-making characteristics of lower income families is projected due to an expected improvement in their financial well-being.

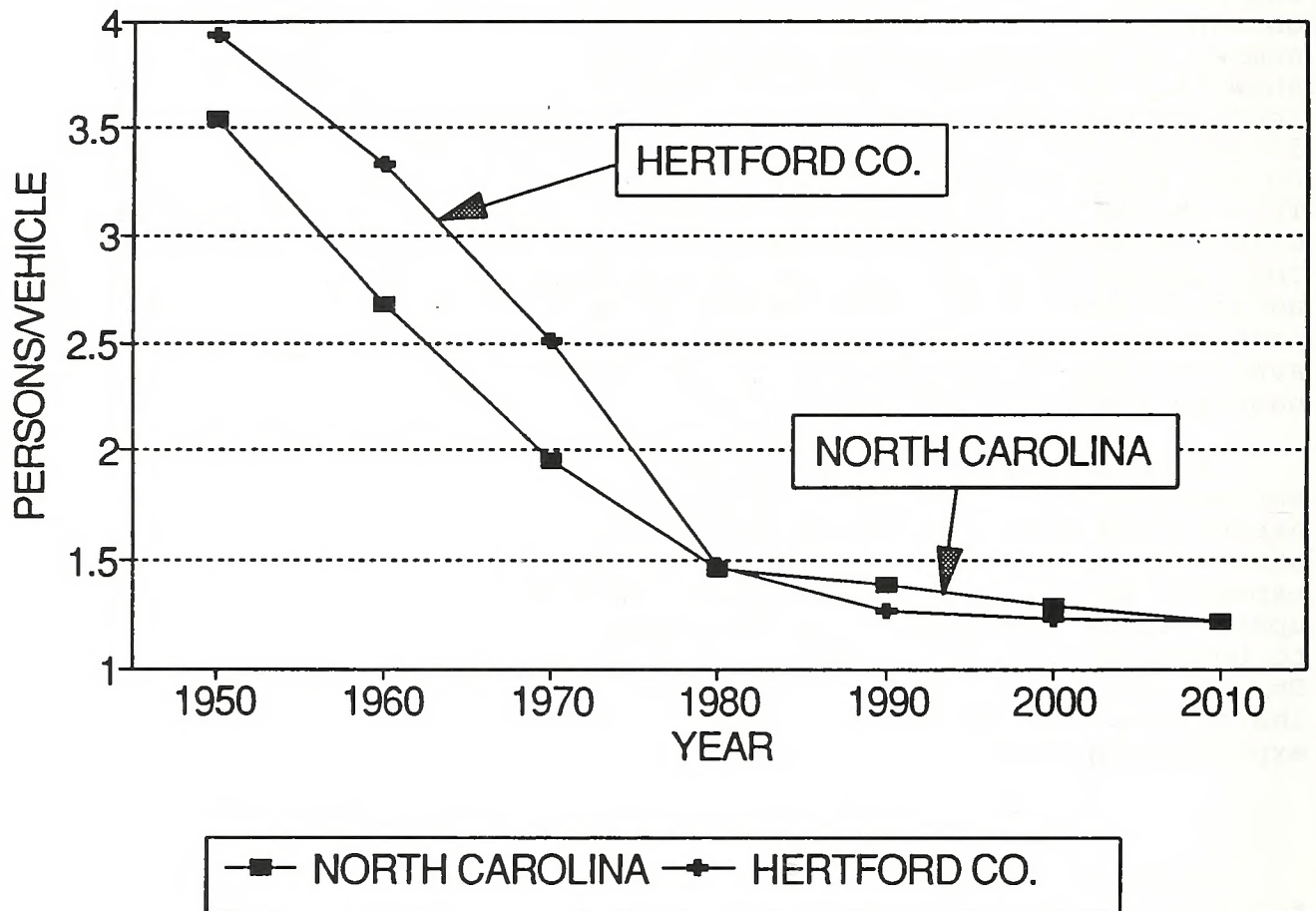
Capacity, Width, and Alignment Deficiencies

North Carolina's standard for highway construction calls for 11-foot lanes on all highways with traffic volumes greater than 2000 ADT (average daily traffic) or design speeds greater than 50 miles per hour. This includes all primary arterials. A minimum lane width of 9 feet can be tolerated on collector roads with an ADT of less than 400 vehicles per day. The minimum level of service for minor collector roads dictates a 40 mph design speed during peak traffic conditions.

Design requirements for thoroughfares vary according to the desired capacity and level of service to be provided. Universal standards in the design of thoroughfares are not practical. Each road or highway section must be individually analyzed and its

GRAPH 1

PERSONS PER VEHICLE TREND FOR NORTH CAROLINA AND HERTFORD COUNTY



design requirements determined by the amount and type of projected traffic, existing capacity, desired level of service, and available right of way.

The level of service is a function of the ease of movement experienced by motorists using the facility. The ability of a motorist to drive at a desired speed is dependent upon many factors. Included are the physical design of the road, the amount and character of traffic control devices, the influence and character of traffic generated by abutting property, and the imposed speed restrictions. The level of service is generally indicated by the overall travel speed experienced by traffic. Recommended minimum levels of service for roads and highways included in the proposed Hertford County Thoroughfare Plan are given in Table 3.

TABLE 3	
Minimum Levels of Service for Roads and Highways	
Facility	Overall Travel Speed During Peak Travel Conditions
Major and Minor Arterials	50-55 MPH
Major Collector Roads	45-50 MPH
Minor Collector Roads	40 MPH

For driver convenience, ease of operations, and safety, it would be desirable to widen all existing roads and highways to provide a minimum lane width of 12 feet. However, when considering overall statewide needs and the available highway revenue, it is found that these levels of improvement applied statewide would be impractical. Therefore, it is necessary to establish minimum tolerable widths for existing roads with respect to traffic demands that would be economically feasible. The widths used in determining the existing lane deficiencies in the County are given in Table 4.

TABLE 4			
Minimum Tolerable Lane Widths (in feet)			
ADT	Principal Arterials	Minor Arterials	Collectors
over 2,000	11	11	11
400 - 2,000	-	10	10
100 - 400	-	10	9
below 100	-	-	9

An analysis of roads in Hertford County was made to determine if the projected traffic for year 2020 would exceed the practical capacity of the system. The projected volumes are shown in Table 5 and Figure 6. Comparing the projected traffic to available capacities, it was anticipated that the following roads will be experiencing capacity related problems within the design period:

1. US 13, from NC 42 to Winton Bypass;
2. NC 42 / NC 11, south of SR 1111;
3. US 258 / US 158, west of SR 1300; and
4. NC 561, west of NC 461.

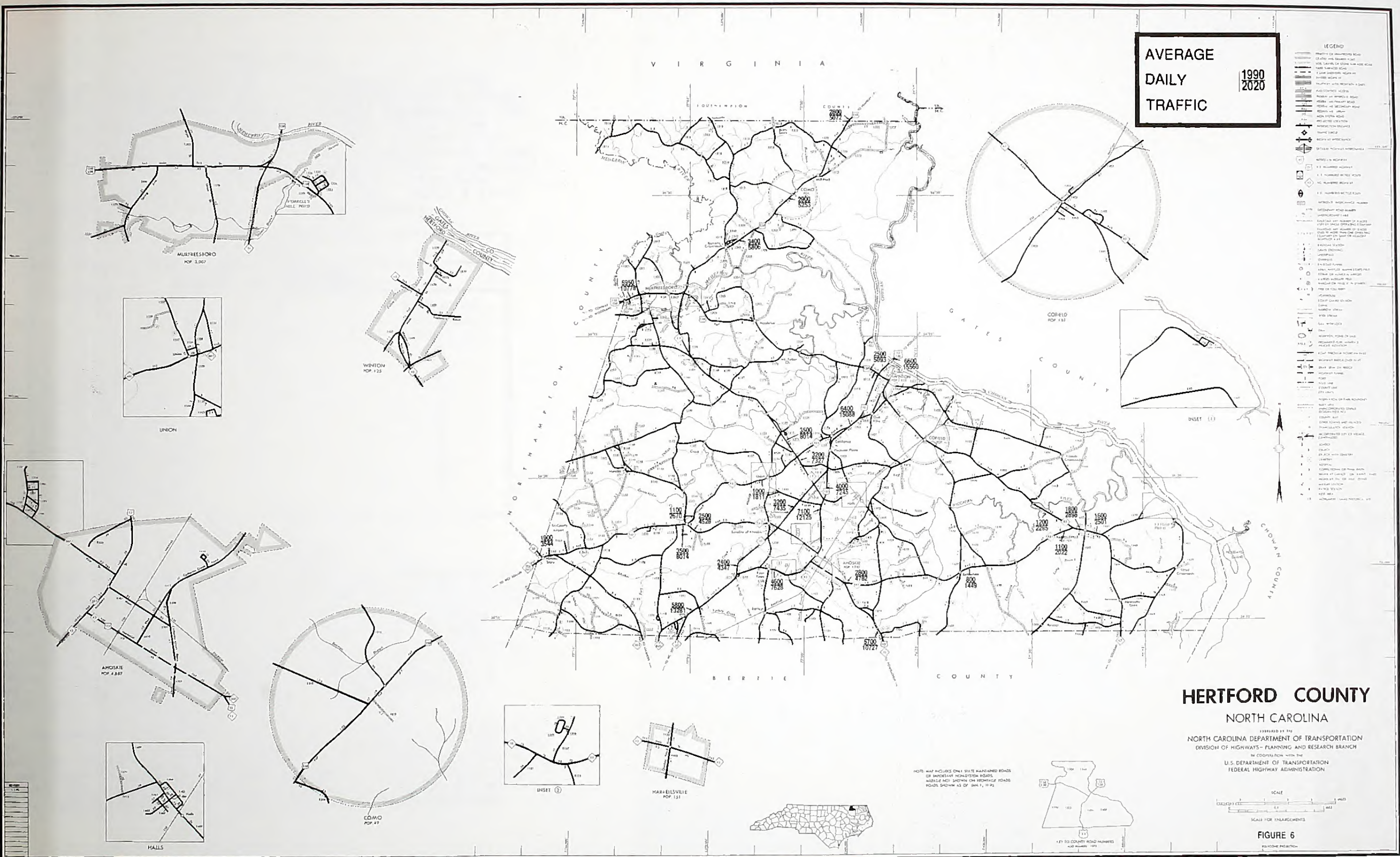
There are a number of major roads in Hertford County that have substandard widths. The standards established in Table 4 were used in the analysis. The width needed to bring these roads up to standard are given as the recommended cross section in the Thoroughfare Plan Street Tabulation and Recommendations in Appendix A. Because of the substantial cost of upgrading all secondary roads to standard, narrow widths may have to be tolerated until sufficient funds are available for improvements.

Table 5

HERTFORD COUNTY TRAFFIC VOLUMES

LOCATION	1970	1980	1990	2010 *	2020
NC 561 @ NC 45	320	1,200	1,100	1,651	2,022
NC 561 East SR 1427	680	800	800	1,189	1,449
NC 561 East of NC 461	1,600	2,100	2,500	3,715	4,528
NC 561 West of NC 461	1,750	2,400	3,500	6,571	8,014
NC 561 East of NC 42/US 13	1,950	2,500	2,800	4,000	4,782
NC 561/NC 305 East of NC 35	1,650	1,700	1,900	2,365	3,544
NC 45 West of NC 561	750	900	1,200	1,844	2,285
NC 45 East of NC 561	1,300	1,800	1,800	2,473	2,898
NC 45 East of SR 1002	1,200	1,600	1,600	2,155	2,501
NC 45 West of SR 1403	1,050	1,300	1,700	2,841	3,672
US 13 North of SR 1411	3,650	3,300	4,000	5,944	7,245
US 13 North of NC 461	3,800	4,600	6,400	11,337	15,088
US 13 on Chowan River	3,350	3,900	6,600	13,133	15,560
US 13 South of SR 1411	4,850	5,700	7,100	10,144	12,125
US 13/NC 42 North of SR 1420	3,650	4,800	5,700	8,688	10,727
NC 42 East of SR 1106	2,850	3,800	4,600	6,444	7,628
US 158 West of US 13	1,550	2,400	2,500	3,715	5,093
US 158/258 West of SR 1300	5,500	5,900	5,950	8,841	10,778
US 258 East of SR 1310	3,500	3,400	3,400	4,858	5,806
US 258 @ NC-VA State Line	3,000	3,200	2,800	4,161	5,072
US 258 South of SR 1317	3,250	3,200	2,900	4,309	5,253
NC 11 South of SR 1108	1,400	2,600	3,500	6,080	8,014
NC 11 South of SR 1130	1,400	2,300	3,200	6,367	7,435
NC 11 South of SR 1111	2,150	3,800	5,800	10,075	13,280

* Projected



Traffic Safety

Traffic accident records are of assistance in locating problem areas on the highway system. The Intersection Accident Listing for the period from January 1, 1989 to December 31, 1991, lists 12 intersections in Hertford County with five or more accidents. Those intersections with 15 or more accidents, or whose accident severity or property damage is considerably higher than the average, are called significant high accident locations. There is one significant high accident location in Hertford County, at the intersection of NC 11 and NC 561. Table 6 lists the 12 highest accident locations in Hertford County.

TABLE 6

High Accident Locations

Intersection	Number of Accidents
NC 11 & NC 561	24
NC 11 & SR 1212	11
US 13 & US 158	10
NC 11 & SR 1213	9
US 13 & SR 1132	9
NC 11 & NC 461	6
SR 1409 & SR 1413	6
SR 1108 & SR 1130	5
NC 561 & SR 1108	5
NC 461 & SR 1108	5
US 258 & SR 1310	5
US 13 & SR 1130	5

Bridge Conditions

Bridges are vital and unique elements of a highway system. First, they represent the highest unit investment of all elements of the system. Second, any inadequacy or deficiency in a bridge reduces the value of the total investment. Third, a bridge presents the greatest opportunity of all potential highway failures for disruption of community welfare. Finally, and most importantly, a bridge represents the greatest opportunity of all highway failures for loss of life. For these reasons, it is imperative that bridges be constructed to the same design standards as the system of which they are a part.

Congress enacted the National Bridge Inspection Standards on April 27, 1971, implementing the Federal Highway Act of 1968. The standards require that all structures defined as bridges located on any of the Federal-Aid Highway Systems be inspected and that the safe load-carrying capacity be computed at regular intervals, not to exceed two years. A sufficiency index number has been

calculated for each bridge to establish eligibility and priority for replacement. The bridges with the highest priority are replaced as Federal-Aid funds and State funds are made available.

The North Carolina DOT's Bridge Maintenance Unit, with assistance from various consultants, inspects all bridges on the State Highway System. All bridges in Hertford County have been analyzed, rated, appraised, and inventoried, and the resulting data has been reduced to a more readily useable form as a management tool.

Inadequate bridges are classified in two groups: structurally deficient and functionally obsolete. The bridges are evaluated on several different factors to determine their ability to remain in service. These factors include structural adequacy and safety, serviceability and functional obsolescence, essentiality for public use, type structure, and traffic safety features.

A sufficiency rating was used in the analysis to determine the deficiency of each bridge. The sufficiency rating is a method of evaluating factors that determine whether a bridge is sufficient to remain in service. Factors used include: structural adequacy and safety, serviceability and functional obsolescence, essentiality for public use, type of structure, and traffic safety features. The result of this method is a percentage in which 100 represents an entirely sufficient bridge and zero represents an entirely insufficient or deficient bridge. A sufficiency rating of 50 or less qualifies for Federal Bridge Replacement Funds.

Table 7 shows structurally deficient bridges with sufficiency ratings of 50 or less. Only those bridges with ratings of 50 or less are eligible for Federal Bridge Replacement Funds. The locations of these bridges are shown on Figure 7.

TABLE 7			
Structurally Deficient Bridges in Hertford County			
Bridge No.	Location	Estimated Life	Sufficiency Rating
23 *	NC 45 @ Wiccacon River	3	26.2
25	US 13 @ Ahoskie Creek Overflow	10	47.6
40 *	SR 1427 @ Wiccacon River	3	41.9
49 *	SR 1432 @ Chinkapin Creek	6	20.7

* Listed in 1992-1998 Transportation Improvement Program.

Table 8 shows the functionally obsolete bridges in Hertford County that have sufficiency ratings of 75 or less. Those bridges with a star by their number are included in the current Transportation Improvement Program. The bridges with 2 stars by their name are not eligible for federal funds due to their sufficiency rating being greater than 50. The locations of these bridges are shown on Figure 7.

TABLE 8			
Functionally Obsolete Bridges in Hertford County			
Bridge No.	Location	Estimated Life	Suff. Rating
2	SR 1308 @ Liverman Creek	8	35.1
3 *	SR 1319 @ Buckhorn Creek	6	49.3
5 **	SR 1320 @ Buckhorn Creek	10	71.9
10	SR 1311 @ Meherrin River	9	39.4
11	SR 1303 @ Trib. Meherrin River	16	35.6
15	SR 1301 @ Kirbys Creek	5	40.5
19	SR 1164 @ Potecasi Creek	7	21.6
20	SR 1167 @ Old Tree Swamp	12	48.4
27 **	SR 1139 @ Blue Water Branch	10	63.8
28 **	SR 1137 @ Cutawhiskie branch	12	60.8
29 *	SR 1160 @ Potecasi Creek	10	42.6
30 *	SR 1160 @ Potecasi Creek Overflow	10	47.6
31 **	US 13 @ Southern City Limits RR	8	52.8
36	SR 1413 @ Horse Swamp	8	41.0
38 *	SR 1425 @ Flat Swamp	2	12.2
53	SR 1101 @ Ahoskie Creek	31	44.8
57	SR 1150 @ Cutawhiskie Swamp	6	48.3
59	SR 1152 @ Cutawhiskie Swamp	2	45.3
64	SR 1155 @ Cutawhiskie Swamp	6	19.9
67	SR 1118 @ Ahoskie Creek	10	37.5
91 **	SR 1175 @ Mill Creek	10	51.3
97 **	SR 1311 @ Trib. Meherrin River	12	63.0
137 **	SR 1311 @ Meherrin River Overflow	10	58.8
139	SR 1409 @ Horse Swamp	8	45.3

* Listed in 1992-1998 Transportation Improvement Program.

** Not eligible for Federal Funds.

Page 1
Date
Time
Location
Notes

Section 1		Section 2		Section 3	
1	2	3	4	5	6
7	8	9	10	11	12
13	14	15	16	17	18
19	20	21	22	23	24
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937	938	939	940	941	942
943	944	945	946	947	948
949	950	951	952	953	954
955	956	957	958	959	960
961	962	963	964	965	966
967	968	969	970	971	972
973	974	975	976	977	978
979	980	981	982	983	984
985	986	987	988	989	990
991	992	993	994	995	996
997	998	999	1000	1001	1002

V. THOROUGHFARE PLAN

The thoroughfare plan for Hertford County is shown in Figure 8. Elements of the plan are initially classified as urban or rural. Only the continuation of rural thoroughfares serving as urban major thoroughfares are shown within the urban planning area. This is necessary due to the limited detail that can be shown on the map.

Elements of the Hertford County Plan are as follows:

Principal Arterials: US 158, from Winton to Murfreesboro;
US 158, bypass of Murfreesboro;
US 158/US 13, Winton to Gates County; and
US 258, north of Murfreesboro.

Suggestions for the Principal Arterials

Listed below are suggested projects for the Principal Arterials in Hertford County during the period 1991-2020.

US 158 / US 13, west of Winton to the Virginia State line - Widen existing roadway to a multi-lane facility.

US 158, west of Murfreesboro to Winton - Widen existing roadway to a multi-lane facility with a southern bypass of Murfreesboro on new location.

Proposed new US 258 bypass of Murfreesboro - The 1992 Murfreesboro Thoroughfare Plan calls for a US 258 northern bypass of Murfreesboro. This is to alleviate traffic congestion and also provide ease of movements for the through travelers as well as providing for future developments.

Minor Arterials: US 13, proposed new location from Old US 13 Road to Saluda Hall Road (SR 1457 to SR 1408);
US 13, proposed new bypass of Ahoskie;
US 13, from Brinkleyville Road to Saluda Hall Road (SR 1411 to 1408);
US 13, Bertie County to new Ahoskie Bypass; and
Proposed new NC 11, parts on new location and using Benthall Bridge Road (SR 1180),
Woodland Road (SR 1160), Flea Hill Road (SR 1142), Menola Saint Johns Road (SR 1141) and Saint J. Millennium Road (SR 1112).

Suggestions for the Minor Arterials

US 13, from NC 42 to the Winton Bypass - Multi-lane facility with a bypass of Ahoskie on new location.

Proposed new NC 11 - parts on new location and using SR 1180, SR 1160, SR 1142, SR 1141, and SR 1112. The existing secondary roads should be improved to provide 12-foot travel lane (See Figure A1).

Hertford County lacks a major north-south road in the western part of the County. The proposed new NC 11 will help the travelers from Virginia to use US 258 and NC 11 (new proposed NC 11) straight down to Bertie County. This facility will serve industries in the western region of the Hertford County and will provide for future development.

Collector Road System

The rural collector routes primarily serve intercounty travel. The major collector roads supplement the arterial system by providing an interconnecting network between smaller population centers and the arterial system. The minor collector roads collect traffic from the local roads and carry it to a higher system facility. The major and minor collector roads in Hertford County are as follows:

Major Collectors: NC 11;
NC 561;
NC 45;
NC 461;
NC 305; and
NC 42.

Minor Collectors: Ahoskie-Cofield Road (SR 1403), NC 45 to Chesterfield Club Road (SR 1413);
Hall Spring Road (SR 1409), Ahoskie Planning Boundary to US 13;
Saluda Hall Road (SR 1408);
Lee Jernigan Road (SR 1101), Bertie County to Ahoskie Planning Boundary;
Early Station Road (SR 1106), Bertie County to Ahoskie Planning Boundary;
Boone Farm Road (SR 1108), NC 11 to Ahoskie Planning Boundary;
Woodland Road (SR 1160), proposed new NC 11 to Northampton County;
Benthal Bridge Road (SR 1180), proposed new NC 11 to Murfreesboro planning Boundary;
Vaughan Mill Road (SR 1301), Murfreesboro Planning Boundary to Northampton County;
North Wynn Road (SR 1302), Murfreesboro Planning Boundary to SR 1301;
Statesville Road (SR 1310); and
US 13, Existing section between Old US 13 Road (SR 1457) to Saluda Hall Road (SR 1408).

Suggestions for the Collector Roads

Most major collector roads in Hertford County have lane width deficiencies and therefore it is recommended to widen these roads to 12-foot lanes with appropriate shoulders as listed in Appendix A, Table A1.

Local Roads

Ahoskie-Cofield Road (SR 1403), from NC 45 to River Road (SR 1400) - This section of SR 1403 needs improvement because of width deficiency and safety concerns. It is recommended to widen SR 1403 to a 34-foot curb-and-gutter section from the intersection of SR 1403 and NC 45 to SR 1400.

The North Carolina Highway Trust Fund Law

The Highway Trust Fund Law was established in 1989 as a 13.5 year plan with four major goals for North Carolina's roads and highways. These goals are:

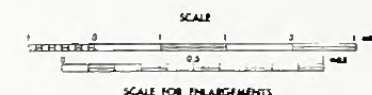
1. To complete the remaining 1,716 miles of four lane construction on the 3,600 mile North Carolina Intrastate System.
2. To construct a multilane connector road in Ashville and portions of multilane loops in Charlotte, Durham, Greensboro, Raleigh, Wilmington, and Winston Salem.
3. To supplement the secondary roads appropriation in order to pave, by 1999, 10,000 miles of unpaved secondary roads carrying 50 or more vehicles per day, and all other unpaved secondary roads by 2006.
4. To supplement the Powell Bill Program.

In this thirty year planning period, Hertford County should look forward to the paving of most, if not all, secondary roads that are on the state maintained system.

For more information on the Highway Trust Fund Law, contact the Program Development Branch of the North Carolina Department of Transportation.

THOROUGHFARE PLAN
HERTFORD COUNTY
 NORTH CAROLINA

PREPARED BY THE
 NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS - PLANNING AND RESEARCH BRANCH
 IN COOPERATION WITH THE
 U.S. DEPARTMENT OF TRANSPORTATION
 FEDERAL HIGHWAY ADMINISTRATION



SEPTEMBER 17, 1991

ADOPTED BY:

HERTFORD COUNTY SEPTEMBER 17, 1991
 STATEWIDE PLANNING BRANCH APRIL 13, 1992 *M.R. Bell*
 N.C. DEPT. OF TRANSPORTATION MAY 8, 1992
 PUBLIC HEARING DATE AUGUST 19, 1991

LEGEND

PRINCIPAL ARTERIALS	EXISTING	PROPOSED
INTERSTATE	=====	=====
OTHER	=====	=====
MINOR ARTERIALS	=====	=====
MAJOR COLLECTORS	=====	=====
MINOR COLLECTORS	=====	=====
URBAN MAJOR	=====	=====
PLANNING BOUNDARY	=====	=====

REVISIONS

HERTFORD CO.	STATEWIDE PLANNING BRANCH	DEPT. OF TRANSPORTATION

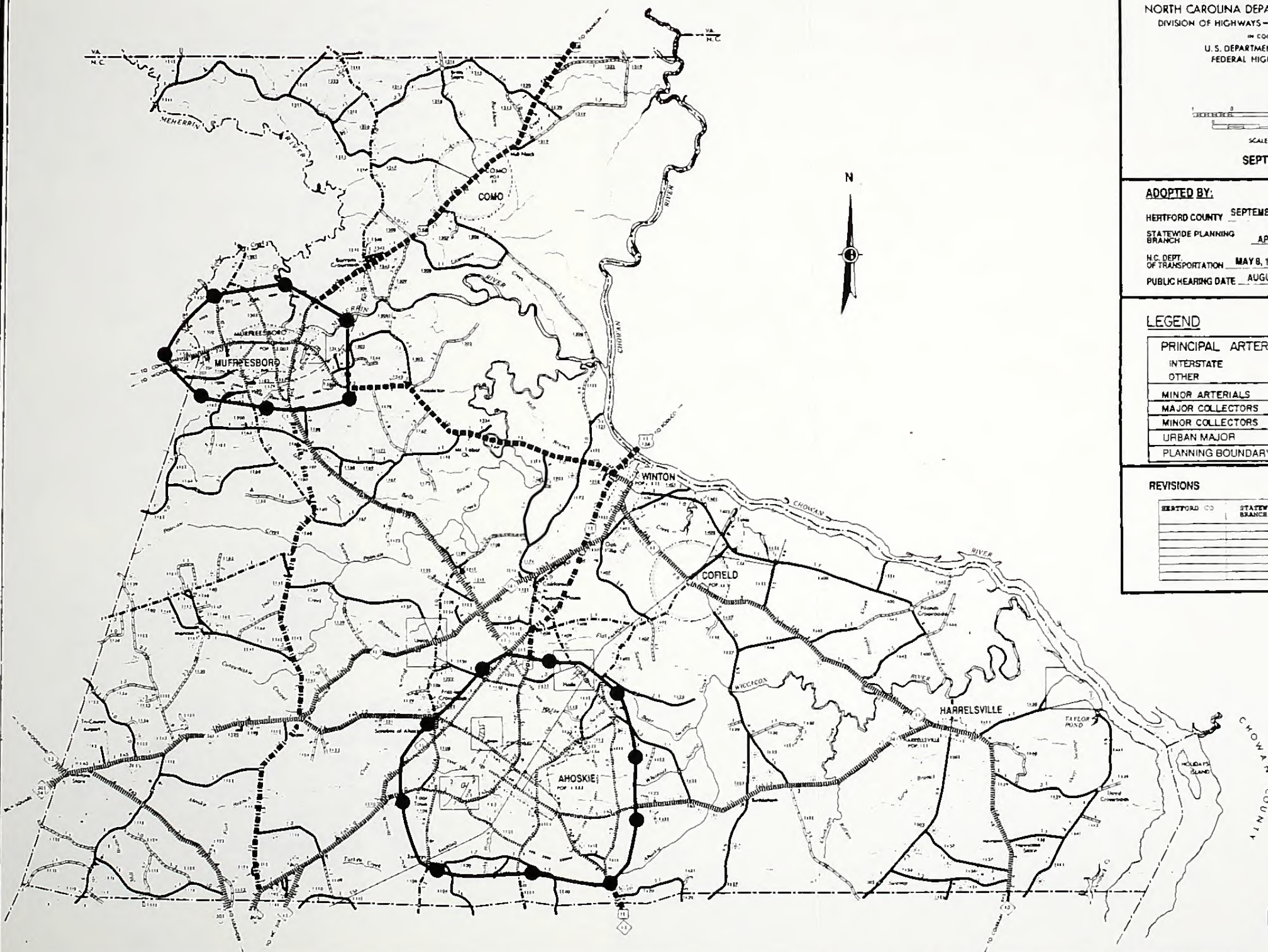


FIGURE 8

VI. IMPROVEMENT PRIORITIES

The improvements recommended in the Hertford County Thoroughfare Plan obviously cannot be undertaken all at once, nor should they be. The cost would be overwhelming and the need for many of the improvements is not immediate. In an effort to reflect the relative value of various improvements, an assessment has been made of the benefits that can be expected from each project and a comparison has been made to the projected costs involved. The result of this benefit-cost analysis is the development of a listing of priorities for those recommended improvements (See Table 10).

Priorities have been set by comparing the benefits that will result to the expected project costs. Three principal measures of benefits were used: road user cost savings, the potential for increased economic development resulting from the improvement, and the environmental impact, both positive or negative, which might result. The first measure is an actual estimate of dollar savings, while the others are estimates of the probability of the resulting change.

Reduced road user costs should result from any roadway improvement, from a simple widening to the construction of a new roadway to relieve congested or unsafe conditions. Comparisons of the existing and the proposed facility have been made in terms of vehicle operating costs, travel time costs, and accident costs. These user benefits are computed as total dollar savings over the 20-year design period using data such as project length, base year and design year traffic volumes, traffic speed, type of facility, and volume/capacity ratio.

The impact of a project on economic development potential is denoted as the probability that it will stimulate the economic development of an area by providing access to developable land and reducing transportation costs. It is a subjective estimate based on the knowledge of the proposed project, local development characteristics, and land development potential. The probability is rated on a scale from 0 (none) to 1.00 (excellent).

The environmental impact analysis considers the effect of a project on the physical, social/cultural, and economic environment. Table 9 lists the items that are considered when evaluating the impact on the environment. Many of these have been accounted for in evaluating the project with respect to user benefits, cost, and economic development potential. However, thirteen environmental factors are generally not considered when evaluating the project with respect to user benefits. They are the environmental impacts of a project on: (1) air quality, (2) water resources, (3) soils and geology, (4) wildlife, (5) vegetation,

(6) neighborhoods, (7) noise, (8) educational facilities, (9) churches, (10) parks and recreational facilities, (11) historic sites and landmarks, (12) public health and safety, and (13) aesthetics. The summation of both positive and negative impact probabilities with respect to these factors provides a measure of the relative environmental impact of a project.

TABLE 9	
Environmental Considerations	
Physical Environment	

Air quality	
Water Resources	
Soils and Geology	
Wildlife	
Vegetation	
Social and Cultural Environment	

Housing	
Neighborhoods	
Noise	
Educational Facilities	
Churches	
Parks and Recreational Facilities	
Public Health and Safety	
National Defense	
Aesthetics	
Economic Environment	

Businesses	
Employment	
Economic Development	
Public Utilities	
Transportation Costs	
Capital Costs	
Operation and Maintenance Costs	

Offsetting the benefits that would be derived from any project is the cost of its construction. A new facility, despite its high projected benefits, might prove to be unjustified due to the excessive costs involved in construction. The highway costs estimated in this report are based on the average statewide construction costs for similar project types. An estimate of anticipated right-of-way costs

is also included. Table 10 lists the priority order for the proposed Hertford County projects with respect to user benefits, estimated costs, probability of economic development, and environmental impact.

Bridge Replacement Priorities

The deficient bridges shown in Table 11 were placed in three priority groups based on computer data and information supplied by the Bridge Maintenance Unit of the North Carolina Department of Transportation. Data such as the remaining life of the bridge, length, width, and sufficiency rating were used to determine these priorities. Those bridges with sufficiency rating of greater than 50 are not eligible for Federal Funds and have to be funded locally by the North Carolina Department of Transportation.

TABLE 10

BENEFITS EVALUATION AND IMPROVEMENT PRIORITIES

PROJECT	LENGTH (MILES)	TOTAL BENEFIT (IN MILLIONS OF \$)	COST (IN MILLIONS OF \$)	ECONOMIC		ENVIRONMENTAL IMPACT PROBABILITY
				DEVELOPMENT POTENTIAL PROBABILITY		
1 - US 13, from NC 42 to Winton Bypass - Multi-lane facility with a bypass of Ahoskie.	11.20	81.82	C 23.20 R 8.00	.50		+ .40 - .30
2 - US 13, SR 1457 to the Virginia State line - Widen existing roadway to multi-lane facility.	17.50	68.90	C 26.40 R 10.00	.40		+ .30 - .40
3 - US 158, Murfreesboro Bypass to US 13 - Widen existing roadway to multi-lane facility.	8.30	28.56	C 10.80 R 4.20	.30		+ .30 - .40
4 - Proposed new NC 11 - Parts on new location and improve SR 1180, SR 1160, SR 1142, SR 1141 and SR 1112.	12.30	77.96	C 8.03 R 0.46	.50		+ .30 - .20
5 - NC 561, from NC 45 to Northampton County line - Widen existing facility to 24 feet.	24.48	27.49	C 16.68 R 0.73	.30		+ .20 - .00
6 - NC 305, from Bertie to Northampton County line - Widen existing facility to 24 feet.	5.49	6.61	C 3.90 R 0.00	.30		+ .20 - .00
7 - NC 45, from Bertie County to Winton Town limit - Widen existing facility to 24 feet.	15.95	17.33	C 9.50 R 0.00	.35		+ .20 - .00

TABLE 11

Improvement Priorities for Bridges in Hertford County

	BRIDGE NO.	FACILITY CARRIED	FEATURES INTERSECTED	SUFF. RATING	EST.LIFE CODE*	1990 ADT
FIRST	23	NC 45	WICCACON RIVER	26.2	A	2,000
PRIORITY:	38	SR 1425	FLAT SWAMP	12.2	A	100
TIP	40	SR 1427	WICCACAN RIVER	41.9	A	240
PROJECTS	29	SR 1160	POTECASI CREEK	42.6	B	500
	30	SR 1160	POTECASI CREEK OVERFLOW	47.6	B	500
	3	SR 1319	BUCKHORN CREEK	49.3	B	100
SECOND	15	SR 1301	KIRBYS CREEK	40.5	A	600
PRIORITY:	25	US 13	AHOSKIE CREEK OVERFLOW	47.6	B	7,000
	139	SR 1409	HORSE SWAMP	45.3	B	600
	31	US 13	SOUTHERN CITY LIMIT RAIL RD	52.8	B	10,350
	53	SR 1101	AHOSKIE CREEK	44.8	C	2,000
THIRD	59	SR 1152	CUTAWHISKIE SWAMP	45.3	A	100
PRIORITY:	36	SR 1413	HORSE SWAMP	41.0	B	1000
	64	SR 1155	CUTAWHISKIE SWAMP	19.9	B	200
	49	SR 1432	CHINKAPIN CREEK	20.7	B	100
	19	SR 1164	POTECASI CREEK	21.6	B	100
	2	SR 1308	LIVERMAN CREEK	35.1	B	100
	67	SR 1118	AHOSKIE CREEK	37.5	B	220
	10	SR 1311	MEHERRIN RIVER	39.4	B	190
	57	SR 1150	CUTAWHISKIE SWAMP	48.3	B	150
	91	SR 1175	MILL CREEK	51.3	B	100
	137	SR 1311	MEHERRIN RIVER OVERFLOW	58.8	B	200
	27	SR 1139	BLUE WATER BRANCH	63.8	B	50
	5	SR 1320	BUCKHORN CREEK	71.9	B	100
	11	SR 1303	TRIB. MEHERRIN RIVER	35.6	C	300
	20	SR 1167	OLD TREE SWAMP	48.4	C	250
	28	SR 1137	CUTAWHISKIE SWAMP	60.8	C	150
	97	SR 1311	TRIB. MEHERRIN RIVER	63.0	C	200

* Estimated Remaining Life Code:

A: 5 years or less

B: 6-10 years

C: 11-20 years

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VII. IMPLEMENTATION

There are several tools which are available for use by local government to assist in the implementation of a thoroughfare plan. They are as follows:

State-County Adoption of the Thoroughfare Plan

If requested, the Department of Transportation in cooperation with local government will develop and mutually approve a thoroughfare plan. The mutually approved plan would serve as a guide to the Department of Transportation in the development of the road and highway system of the County. The approval of the plan by local government would enable standard road regulations and land use controls to be effectively used to assist in the implementation of the plan. Hertford County officially adopted the Hertford County Thoroughfare Plan, map dated September 17, 1991. The North Carolina Board of transportation mutually adopted the plan on May 8, 1992.

Subdivision Controls

Subdivision regulations require every subdivider to submit to the local planning commission a plan of his proposed subdivision and requires that the subdivision be constructed to certain standards. Through this process, it is possible to require the subdivision streets to conform to the thoroughfare plan and to reserve or protect necessary rights-of-way for projected roads and highways that are to become a part of the thoroughfare plan. The construction of subdivision streets to adequate standards would reduce maintenance costs and would facilitate the transfer of the streets to the State highway system. Appendix B outlines the recommended design standards.

Land Use Controls

Land use regulations are an important tool in that they will regulate future land development and minimize undesirable development along roads and highways. The land use regulatory system can improve highway safety by requiring sufficient building setbacks to provide for adequate sight distances and by requiring off-street parking.

Funding

The majority of North Carolina highway improvements are scheduled and funded by the Transportation Improvement Program (T.I.P.). The Board of Transportation regularly conducts public meetings to obtain input from the public pertaining to their needs for highway improvements.

Not all roadway improvements are covered by this procedure. Nearly all secondary road work is done on a county by county basis. These funds, known as the county construction account, are

used to pave unpaved roads, widen roadways, stabilize dirt roads, make minor alignment improvements, and construct short connectors when appropriate. Local officials are encouraged to work with the Division Engineer to develop the County's priority list. Many of the minor improvements recommended may be realized by using the County's construction account funds and developing the County's priority list in conjunction with the Division Engineer.

APPENDIX A

Typical Cross Sections

Typical cross sections recommended by the Thoroughfare Planning Unit are shown in Appendix A, Figure A1, and listed in Appendix A, Table A1.

Cross section "A" is typical for controlled access freeways. The 46 foot grassed median is the minimum median width. Wider variations could result depending upon design considerations. Slopes of 8:1 into 3 foot drainage ditches are desirable for traffic safety. Right-of-way requirements would typically vary upward from 250 feet depending upon cut and fill requirements.

Cross section "B" is typical for four lane divided highways in rural areas that may have only partial or no control of access. The minimum median width for this cross section is 30 feet, but a wider median is desirable. Design requirements for slopes and drainage would be similar to cross section "A", but there may be some variation from this depending upon right-of-way constraints.

Cross section "C", seven lane urban, and cross section "D", five lane urban, are typical for major thoroughfares where frequent left turns are anticipated as a result of abutting development or frequent street intersections.

Cross sections "E" and "F" are used on major thoroughfares where left turns and intersecting streets are not as frequent. Left turns would be restricted to a few selected intersections.

Cross section "G" is recommended for urban boulevards or parkways to enhance the urban environment and to improve the compatibility of major thoroughfares with residential areas. A minimum median width of 24 feet is recommended with 30 feet being desirable.

Typical cross section "H" is recommended for major thoroughfares where projected travel indicates a need for four travel lanes, but traffic is not excessively high, left turning movements are light, and right-of-way is restricted. An additional left turn lane would probably be required at major intersections.

Thoroughfares which are proposed to function as one-way traffic carriers would typically require cross section "I".

Cross sections "J" and "K" are recommended for minor thoroughfares since these facilities usually serve both land service and traffic service functions. Cross section "J"

would be used on those minor thoroughfares where parking on both sides is needed as a result of more concentrated development.

Cross section "L" is used in rural areas or for staged construction of a wider multilane cross section. On some thoroughfares, projected traffic volumes may indicate that two travel lanes will adequately serve travel for a considerable period of time.

The curb and gutter cross sections all illustrate the sidewalk next to the curb with a buffer or utility strip between the sidewalk and the minimum right-of-way line. This permits adequate setback for utility poles. If it is desired to move the sidewalk farther away from the street to provide added separation for pedestrians or for aesthetic reasons, additional right-of-way must be provided to insure adequate setback for utility poles.

Rights-of-way shown for the typical cross sections are the minimum rights-of-way required to contain the street, sidewalks, utilities, and drainage facilities. Cut and fill requirements may require either additional right-of-way or construction easements. Obtaining construction easements is becoming the more common practice for urban thoroughfare construction.

If there is sufficient bicycle traffic along the thoroughfare to justify a bicycle lane or bikeway, additional right-of-way may be required to allow for the bicycle facilities. The North Carolina Bicycle Facility and Program Handbook should be consulted for bicycle facility design standards.

Recommended typical cross sections for thoroughfares were derived using projected traffic, existing capacities, desirable levels of service, and available right-of-way.

TYPICAL THOROUGHFARE CROSS SECTIONS

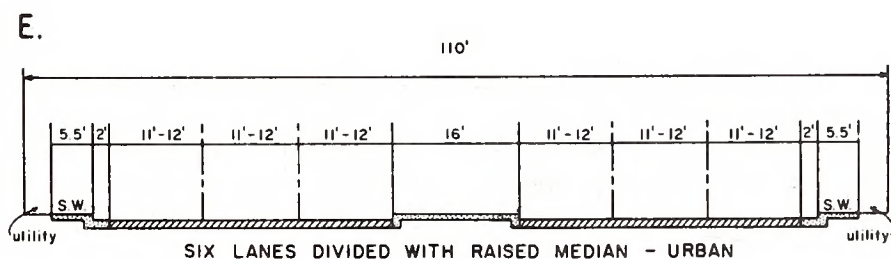
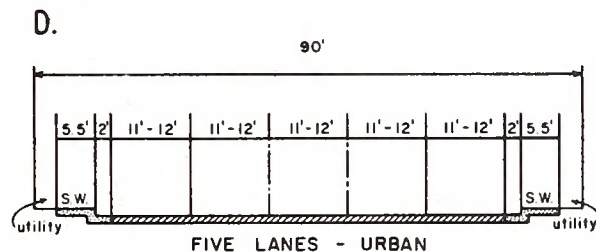
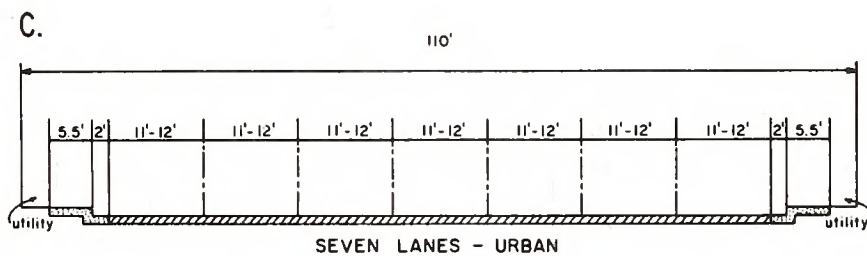
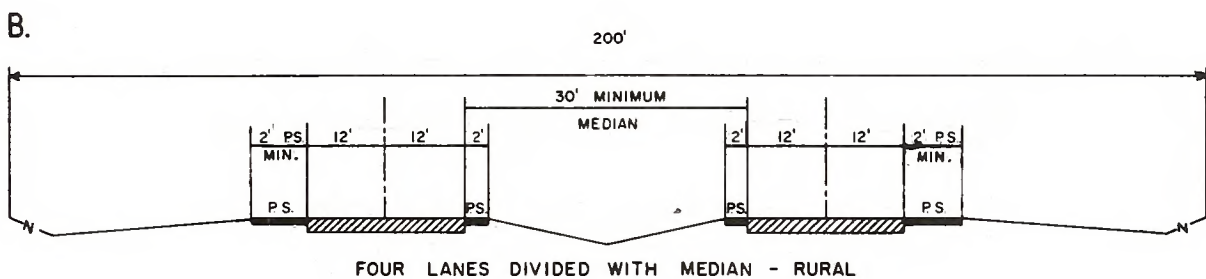
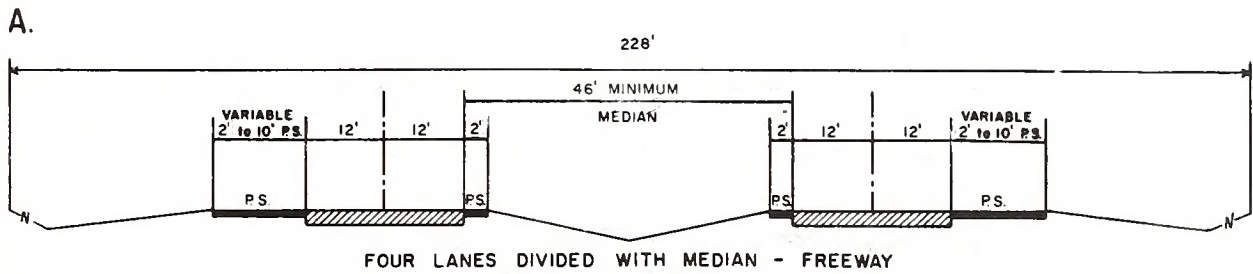
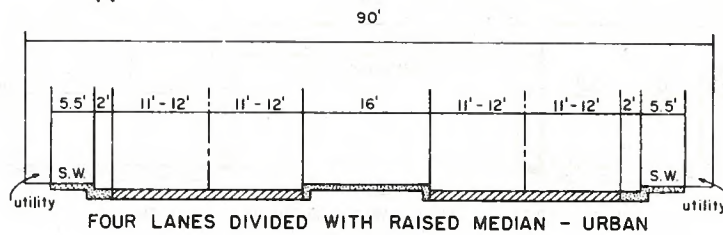


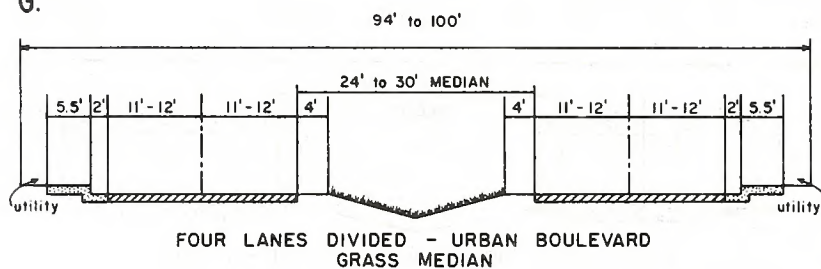
FIGURE A1

TYPICAL THOROUGHFARE CROSS SECTIONS (CONTINUED)

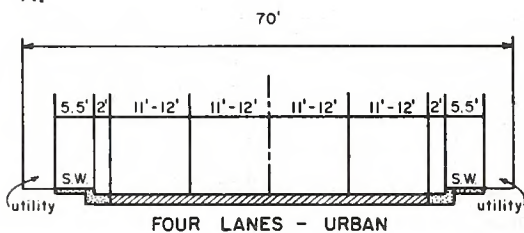
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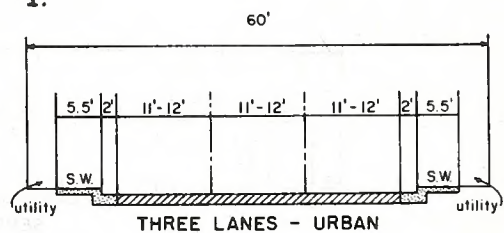
G.



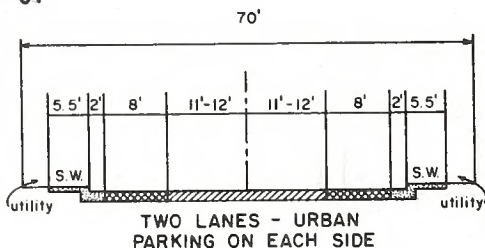
H.



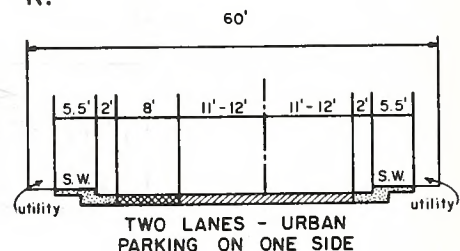
I.



J.



K.



L.

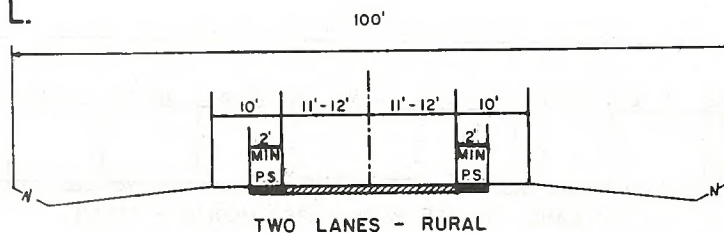


TABLE A1 - THOROUGHFARE PLAN STREET TABULATION AND RECOMMENDATIONS

HERTFORD COUNTY: FACILITY AND SECTION	EXISTING CROSS SECTION			CAPACITY CURRENT (FUTURE)	RECOMMENDED CROSS SECTION			
	DIST MI	RDWY FT	ROW FT		1990 ADT	2020 ADT	RDWY (ULT)	ROW (ULT)
US 13:								
BERTIE CO.-AHOSKIE PLAN'G REGION	0.60	20	60	8,300	5,700	10,700	(B)	(200)
AHOSKIE PLAN'G REGION-US 158	5.82	24	60	10,000	6,400	15,090	(B)	(200)
US 158-GATES CO.	0.75	24	60	10,000	6,600	15,560	(B)	(200)
US 158:								
MURFREESBORO PLAN'G REGION-US 13	8.10	24	100	10,000	2,500	5,100	ADQ	ADQ
US 258:								
MURFREESBORO PLAN'G REGION-SR 1310	1.60	24	100	10,000	4,100	7,500	ADQ	ADQ
SR 1310- VA. STATE LINE	7.30	24	100	10,000	3,400	5,800	ADQ	ADQ
NC 11:								
BERTIE CO.-NC 42	3.70	24	210	10,000	5,800	13,280	(B)	ADQ
NC 42-AHOSKIE PLAN'G REGION	1.00	24	210	10,000	2,400	4,350	ADQ	ADQ
AHOSKIE PLAN'G REGION-MURFREESBORO PLAN'G REGION	8.60	24	100	10,000	3,500	8,000	ADQ	ADQ
NC 11 BUSINESS:								
BERTIE CO.- NC 11/42	1.44	24	100	10,000	2,000	4,200	ADQ	ADQ
NC 35:								
NC 561-NORTHAMPTON CO.	0.20	20	60	8,300	600	2,000	(L)	ADQ
NC 45:								
BERTIE CO.-SR 1002	4.73	20	60	8,300	1,600	2,500	(L)	ADQ
SR 1002- NC 561	0.43	43	60		1,800	2,900	ADQ	ADQ
NC 561-SR 1457	9.89	20	60	8,300	1,800	2,900	(L)	ADQ
SR 1457-WCL WINTON	0.58	44	60		3,400	6,000	ADQ	ADQ
WCL WINTON-US 13	0.32	20	60	8,300	1,800	3,700	(L)	ADQ
NC 42: (COMMON US 13)								
BERTIE CO. LINE-AHOSKIE PLAN'G REGION	0.60	20	60	8,300	5,700	10,700	(B)	(200)
BERTIE CO. LINE-NC 11 (COMMON NC 11)	3.40	24	210	10,000	5,800	13,280	(B)	ADQ
NC 11-AHOSKIE PLAN'G REGION	0.50	24	100	10,000	4,800	9,800	ADQ	ADQ
NC 305:								
BERTIE CO. LINE-NC 561	4.84	20	60	8,300	1,000	2,100	(L)	ADQ
NC 561-NC 35	0.60	20	60	8,300	1,900	3,600	(L)	ADQ
NC 35-NORHAMPTON CO.	0.05	20	60	8,300	1,600	3,300	(L)	ADQ

TABLE A1 - THOROUGHFARE PLAN STREET TABULATION AND RECOMMENDATIONS

HERTFORD COUNTY: FACILITY AND SECTION	EXISTING CROSS SECTION			CAPACITY	1990 ADT	2020 ADT	RECOMMENDED CROSS SECTION	
	DIST (MI)	RDWY (FT)	ROW (FT)				RDWY (ULT)	ROW (ULT)
NC 461:								
NC 561- NC 11	5.74	18	60	6,600	1,100	2,670	(L)	ADQ
NC 11- US 13	2.56	18	60	6,600	1,000	2,500	(L)	ADQ
NC 561:								
NORTHAMPTON CO.-NC 305 (COMMON NC 305)	0.65	20	60	8,300	1,900	3,600	(L)	ADQ
NC 305-NC 461	5.53	18	60	6,600	3,500	8,000	(L)	ADQ
NC 461-AHOSKIE PLAN'G REGION	3.65	20	60	8,300	2,500	4,600	(L)	ADQ
AHOSKIE PLAN'G REGION- NC 45	8.00	20	60	8,300	1,100	2,100	(L)	ADQ
SR 1101:								
BERTIE COUNTY-AHOSKIE PLAN'G REGION	0.80	18	60	6,600	600	1,300	(L)	ADQ
SR 1106:								
BERTIE COUNTY-AHOSKIE PLAN'G REGION	1.10	18	60	6,600	550	1,200	(L)	ADQ
SR 1112:								
NC 11- NC 561	4.70	18	60	6,600	700	1,600	(L)	ADQ
SR 1141:								
NC 561- SR 1142	1.60	18	60	6,600	450	1,100	(L)	ADQ
SR 1142:								
SR 1141- SR 1160	2.80	18	60	6,600	400	900	(L)	ADQ
SR 1160:								
SR 1142- SR 1180	1.20	18	60	6,600	500	1,100	(L)	ADQ
SR 1180:								
SR 1160- MP 2.80	2.80	18	60	6,600	900	1,900	(L)	ADQ
MP 2.80- MURFREESBORO PLAN'G REGION	0.70	20	60	8,300	900	1,900	(L)	ADQ
SR 1212:								
NC 11-US 13	0.70	24	400	10,000	2,400	5,200	ADQ	ADQ
SR 1301:								
SR 1300- MP 0.60	0.60	20	50	8,300	100	400	(L)	ADQ
MP 0.60- MP 1.30	0.70	18	50	6,600	600	1,400	(L)	ADQ
MP 1.30- NHAMPT. CO.	0.30	20	50	6,600	600	1,400	(L)	ADQ
SR 1302:								
SR 1301-MURFREESBORO PLAN'G REGION	0.55	18	60	6,600	1,224	3,000	(L)	ADQ
SR 1310:								
US 258- VA. STATE LINE	5.60	18	60	6,600	400	900	(L)	ADQ

TABLE A1 - THOROUGHFARE PLAN STREET TABULATION AND RECOMMENDATIONS

HERTFORD COUNTY: FACILITY AND SECTION	EXISTING CROSS SECTION			CAPACITY	1990 ADT	2020 ADT	RECOMMENDED CROSS SECTION	
	DIST (MI)	RDWY (FT)	ROW (FT)				RDWY (ULT)	ROW (ULT)
SR 1403:								
SR 1409-NC 45	4.12	22	40	9,200	1,620	3,400	(L)	ADQ
NC 45-SR 1400	1.20	20	40	8,300	900	1,600	34-FT	ADQ
SR 1408:								
US 13-SR 1403	2.80	18	60	6,600	260	600	(L)	ADQ
SR 1409:								
US 13-AHOSKIE PLAN'G REGION	1.90	20	60	8,300	600	1300	(L)	ADQ

APPENDIX B

RECOMMENDED SUBDIVISION ORDINANCES

Definitions

I. Streets and Roads:

A. Rural Roads

1. Principal Arterial - A rural link in a highway system serving travel, and having characteristics indicative of substantial statewide or interstate travel and existing solely to serve traffic. This network would consist of Interstate routes and other routes designated as principal arterials.
2. Minor Arterial - A rural roadway joining cities and larger towns and providing intrastate and inter-county service at relatively high overall travel speeds with minimum interference to through movement.
3. Major Collector - A road which serves major intra-county travel corridors and traffic generators and provides access to the Arterial system.
4. Minor Collector - A road which provides service to small local communities and traffic generators and provides access to the Major Collector system.
5. Local Road - A road which serves primarily to provide access to adjacent land, over relatively short distances.

B. Urban Streets

1. Major Thoroughfares - Major thoroughfares consist of Interstate and other freeway, expressway, or parkway roads, and major streets that provide for the expeditious movement of high volumes of traffic within and through urban areas.
2. Minor Thoroughfares - Minor thoroughfares collect traffic from local access streets and carry it to the major thoroughfare system. Minor thoroughfares may be used to supplement the major thoroughfare system by facilitating minor through-traffic movements and may also serve abutting property.
3. Local Street - A local street is any street not on a higher order urban system and serves primarily to provide direct access to abutting land.

C. Specific Type Rural or Urban Streets

1. Freeway, expressway, or parkway - Divided multilane roadways designed to carry large volumes of traffic at high speeds. A freeway provides for continuous flow of vehicles to selected crossroads only by way of interchanges. An expressway is a facility with full or partial control of access and generally with grade separations at major intersections. A parkway is for non-commercial traffic, with full or partial control of access.
2. Residential Collector Street - A local street which serves as a connector street between local residential streets and the thoroughfare system. Residential collector streets typically collect traffic from 100 to 400 dwelling units.
3. Local Residential Street - Cul-de-sacs, loop streets less than 2,500 feet in length, or streets less than one mile in length that do not connect thoroughfares, or serve major traffic generators, and do not collect traffic from more than 100 dwelling units.
4. Cul-de-sac - A short street having only one end open to traffic and the other end being permanently terminated and a vehicular turn-around provided.
5. Frontage Road - A road that is parallel to a partial or full access controlled facility and provides access to adjacent land.
6. Alley - A strip of land, owned publicly or privately, set aside primarily for vehicular service access to the back side of properties otherwise abutting on a street.

II. Property

- A. Building Setback Line - A line parallel to the street in front of which no structure shall be erected.
- B. Easement - A grant by the property owner for use by the public, a corporation, or person(s), of a strip of land for a specific purpose.
- C. Lot - A portion of a subdivision, or any other parcel of land, which is intended as a unit for transfer of ownership or for development or both. The word "lot" includes the words "plat" and "parcel".

III. Subdivision

- A. Subdivider - Any person, firm, corporation or official agent thereof, who subdivides or develops any land deemed to be a subdivision.
- B. Subdivision - All divisions of a tract or parcel of land into two or more lots, building sites, or other divisions for the purpose, immediate or future, of sale or building development and all divisions of land involving the dedication of a new street or change in existing streets; provided, however, that the following shall not be included within this definition nor subject to these regulations: (1) the combination of portions of previously platted lots where the total number of lots is not increased and the resultant lots are equal to or exceed the standards contained herein; (2) the division of land into parcels greater than ten acres where no street right-of-way dedication is involved; (3) widening of open streets; (4) the division of a tract in single ownership whose entire area is no greater than two acres into not more than three lots, where no street right of way dedication is involved and where the resultant lots are equal to or exceed the standards contained herein.
- C. Dedication - A gift, by the owner, of his property to another party without any consideration being given for the transfer. The dedication is made by written instrument and is completed with an acceptance.
- D. Reservation - Reservation of land does not involve any transfer of property rights. It constitutes an obligation to keep property free from development for a stated period of time.

DESIGN STANDARDS

I. Streets and Roads

The design of all roads within Hertford County shall be in accordance with the accepted policies of the North Carolina Department of Transportation, Division of Highways, as taken or modified from the American Association of State Highway Officials' (AASHTO) manuals.

The provision of street rights-of-way shall conform and meet the recommendations of the Thoroughfare Plan, as adopted by Hertford County and the North Carolina Department of Transportation.

The proposed street layout shall be coordinated with the existing street system of the surrounding area. Normally the

proposed streets should be the extension of existing streets if possible.

The urban planning area shall consist of that area within the urban planning boundary as depicted on the mutually adopted Ahoskie, Murfreesboro and Cofield Thoroughfare Plans. The rural planning area shall be that area outside the urban planning boundary.

- A. Right-of-way Widths - Right-of-way (ROW) widths shall not be less than the following and shall apply except in those cases where ROW requirements have been specifically set out in the Thoroughfare Plan.

1. Rural	Minimum ROW
a. Principle Arterial	
Freeways	350 ft.
Other	200 ft.
b. Minor Arterial	100 ft.
c. Major Collector	100 ft.
d. Minor Collector	80 ft.
e. Local Road	* 60 ft.
2. Urban	
a. Major Thoroughfare other than Freeway and Expressway	90 ft.
b. Minor Thoroughfare	70 ft.
c. Local Street	* 60 ft.
d. Cul-de-sac	** Variable

The subdivider will only be required to dedicate a maximum of 100 feet of right-of-way. In cases where over 100 feet of right-of-way is desired, the subdivider will be required only to reserve the amount in excess of 100 feet. On all cases in which right-of-way is sought for a fully controlled access facility, the subdivider will only be required to make a reservation. It is strongly recommended that

* The desirable minimum right-of-way (ROW) is 60 ft. If curb and gutter is provided, 50 feet of ROW is adequate on local residential streets.

** The ROW dimension will depend on radius used for vehicular turn-around. Distance from edge of pavement of turn-around to ROW should not be less than distance from edge of pavement to ROW on street approaching turnaround.

subdivisions provide access to properties from internal streets, and that direct property access to major thoroughfares, principle and minor arterials, and major collectors be avoided. Direct property access to minor thoroughfares is also undesirable.

A partial width right-of-way, not less than sixty feet in width may be dedicated when adjoining undeveloped property that is owned or controlled by the subdivider; provided that the width of a partial dedication be such as to permit the installation of such facilities as may be necessary to serve abutting lots. When the said adjoining property is subdivided, the remainder of the full required right-of-way shall be dedicated.

- B. Street Widths: Width for street and road classifications other than local shall be as required by the Thoroughfare Plan. Width of local roads and streets shall be as follows:

1. Local Residential

Curb and Gutter section: 26 feet, face to face of
curb

Shoulder section: 20 feet to edge of pavement, 4
foot shoulders

2. Residential Collector

Curb and Gutter section: 34 feet, face to face of
curb

Shoulder section: 20 feet to edge of pavement, 6
foot shoulders

- C. Geometric Characteristics - The standards outlined below shall apply to all subdivision streets proposed for addition to the State Highway System or Municipal Street System. In cases where a subdivision is sought adjacent to a proposed thoroughfare corridor, the requirements of dedication and reservation discussed under Right-of-Way shall apply.

1. Design Speed - The design speed for a roadway should be a minimum of 5 mph greater than the posted speed limit. The design speeds for subdivision type streets shall be:

DESIGN SPEEDS				
Facility Type	Desirable Speed	---- Level	Minimum Speed Rolling	---- Mountainous
Rural				
Minor Collector Roads	60	50	40	30
Local roads, including Residential Collectors and Local Residential	50	* 50	* 40	* 30
Urban				
Major Thoroughfares, other than Freeway, Expressway, or Parkway	60	50	50	50
Minor Thoroughfares	60	50	40	40
Local Streets	40	** 40	** 30	** 30

* Based on projected annual average daily traffic of 400-750.
In cases where road will serve a limited area and small number of dwelling units, minimum design speeds can be reduced further.

** Based on projected annual average daily traffic of 50-250.

2. Maximum and Minimum Grades

- a. The maximum grades in percent shall be:

MAXIMUM VERTICAL GRADE			
Design Speed	----- Terrain -----		
	Level	Rolling	Mountainous
60	4	5	6
50	5	6	7
40	6	7	8
30		9	10
20			12

- b. A minimum grade for curbed streets should not be less than 0.5%.
- c. Grades for 100 feet each way from intersections (measured from edge of pavement) should not exceed 5%.
- d. For streets and roads with projected annual average daily traffic less than 250, short grades less than 500 feet long may be 50% greater than the value in the above table.

3. Minimum Sight Distance - In the interest of public safety, no less than the minimum sight distance applicable shall be provided. Vertical curves that connect each change in grade shall be provided and calculated using the following parameters:

SIGHT DISTANCE				
Design Speed, MPH	30	40	50	60
Stopping Sight Distance:				
Minimum (ft.)	200	275	400	525
Desirable Minimum (ft.)	200	325	475	650
Minimum K* Value for:				
Crest Curve	30	80	160	310
Sag Curve	40	70	110	160
Passing Sight Distance:				
Minimum Passing Distance for 2 lanes, in feet	1,035	1,460	1,915	2,380

(General practice calls for vertical curves to be multiples of 50 feet. Calculated lengths shall be rounded up in each case.)

Sight distance provided for stopped vehicles at intersections should be in accordance with "A Policy on Geometric Design of Highways and Streets, 1984".

* K is a coefficient by which the algebraic difference in grade may be multiplied to determine the length in feet of the vertical curve which will provide the desired sight distance.

4. The "Superelevation Table" below shows the maximum degree of curve and related maximum superelevation for design speeds. The maximum rate of roadway superelevation (e) for rural roads with no curb and gutter is 0.08. The maximum rate of superelevation for urban streets with curb and gutter is 0.06, with 0.04 being desirable.

SUPERELEVATION TABLE			
Design Speed	Maximum e*	Minimum Radius ft.	Max. Deg. of Curve
30	0.04	302	19 00'
40	0.04	573	10 00'
50	0.04	955	6 00'
60	0.04	1,528	3 45'
30	0.06	273	21 00'
40	0.06	509	11 15'
50	0.06	849	6 45'
60	0.06	1,380	4 15'
30	0.08	252	22 45'
40	0.08	468	12 15'
50	0.08	764	7 30'
60	0.08	1,206	4 45'

* e = rate of roadway superelevation, foot per foot

D. Intersections

1. Streets shall be laid out so as to intersect as nearly as possible at right angles, and no street should intersect any other street at an angle less than sixty-five (65) degrees.
2. Property lines at intersections should be set so that the distance from the edge of pavement, of the street turnout, to the property line will be at least as great as the distance from the edge of pavement to the property line along the intersecting streets. This property line can be established as a radius or as a sight triangle. Greater offsets from the edge of pavement to the property lines will be required, if necessary, to provide sight distance for the stopped vehicle on the side street.
3. Offset intersections are to be avoided. Intersections which cannot be aligned should be separated by a minimum length of 200 feet between survey centerlines.

E. Cul-de-sacs

Cul-de-sacs shall not be more than five hundred (500) feet in length. The distance from the edge of pavement on the vehicular turnaround to the right-of-way line should not be less than the distance from the edge of pavement to right-of-way line on the street approaching the turnaround. Cul-de-sacs should not be used to avoid connection with an existing street or to avoid the extension of an important street.

F. Alleys

1. Alleys shall be required to serve lots used for commercial and industrial purposes except that this requirement may be waived where other definite and assured provision is made for service access. Alleys shall not be provided in residential subdivisions unless necessitated by unusual circumstances.
2. The width of an alley shall be at least twenty (20) feet.
3. Dead-end alleys shall be avoided where possible, but if unavoidable, shall be provided with adequate turnaround facilities at the dead-end as may be required by the Planning Board.

G. Permits For Connection To State Roads

An approved permit is required for connection to any existing state system road. This permit is required prior to any construction on the street or road. The application is available at the office of the District Engineer of the Division of Highways.

H. Offsets To Utility Poles

Poles for overhead utilities should be located clear of roadway shoulders, preferably a minimum of at least 30 feet from the edge of pavement. On streets with curb and gutter, utility poles shall be set back a minimum distance of 6 feet from the face of curb.

I. Wheelchair Ramps

All street curbs being constructed or reconstructed for maintenance purposes, traffic operations, repairs, correction of utilities, or altered for any reason, shall provide wheelchair ramps for the physically handicapped at intersections where both curb and gutter and sidewalks are provided and at other major points of pedestrian flow.

Wheelchair ramps and depressed curbs shall be constructed in accordance with details contained in the Department of Transportation, Division of Highways, publication entitled, "Guidelines, Curb Cuts and Ramps for Handicapped Persons."

J. Horizontal Width on Bridge Deck

1. The clear roadway widths for new and reconstructed bridges serving 2 lane, 2 way traffic should be as follows:

- a. Shoulder section approach

- i. Under 800 ADT design year:

Minimum 28 feet width face to face of parapets of rails or pavement width plus 10 feet, whichever is greater.

- ii. 800 - 2000 ADT design year:

Minimum 34 feet width face to face of parapets of rails or pavement width plus 12 feet, whichever is greater.

- iii. Over 2000 ADT design year:

Minimum width of 40 feet, desirable width of 44 feet width face to face of parapets of rails.

- b. Curb and gutter approach

- i. Under 800 ADT design year:

Minimum 24 feet face to face of curbs.

- ii. Over 800 ADT design year:

Width of approach pavement measured face to face of curbs.

Where curb and gutter sections are used on roadway approaches, curbs on bridges shall match the curbs on approaches in height, in width of face to face of curbs, and in crown drop. The distance from face of curb to face of parapet or rail shall be 1'6" minimum, or greater if sidewalks are required.

2. The clear roadway widths for new and reconstructed bridges having 4 or more lanes serving undivided two-way traffic should be as follows:

- a. Shoulder section approach - Width of approach pavement plus width of usable shoulders on the approach left and right. (Shoulder width 8' minimum, 10' desirable.)
- b. Curb and gutter approach - Width of approach pavement measured face to face of curbs.

APPENDIX C

HERTFORD COUNTY STATE ROAD NUMBERS AND STREET NAMES

1001	New Ahoskie Rd.	1149	Eley Rd.
1002	Quebec Rd.	1150	Vinson Rd.
1100	Jernigan Airport	1151	Cooke Farm Rd.
1101	Lee Jernigan Rd.	1152	Jim Hardy Rd.
1102	Fretwell Rd.	1153	Parker Rd.
1103	Mitchell Rd.	1154	Baker's Store
1104	Church Rd.	1155	Fennell Rd.
1105	Jonny Mitchell	1156	Lee Harmond Rd.
1106	Early Station	1157	Powell Rd.
1107	Morris Rd.	1158	Vaughan Rd.
1108	Boone Farm Rd.	1159	Hebron Church
1109	Holloman Rd.	1160	Woodland Rd.
1110	Brick mill Rd.	1161	Fitzhugh Parker
1111	Hollowell Rd.	1162	Parker Land Rd.
1112	St. J. Millennium	1163	Pine Tops Rd.
1113	Dunning Rd.	1164	Vinson Mill Rd.
1114	Hortons Church	1165	Vaughantown Rd.
1115	Hoggard Rd.	1166	Storey Road
1116	Joe Phelps Rd.	1167	Beaver Dam Rd.
1117	Buck Branch Rd.	1168	Horton Rd.
1118	Pleasant Grove Rd.	1169	WoodRow School
1119	Teaster Shack	1170	City Street
1120	Odom Rd.	1171	Talton Rd.
1121	Rawls Rd.	1172	Bridger Rd.
1122	Tayloe Rd.	1173	Lewis Rd.
1123	Jackie Brinkley	1174	Mt. Moriah Rd.
1124	Arthur Majette	1175	Parkers Fishery
1125	Feldman Lane	1176	Mt. Tabor Church Rd.
1127	Forest Drive	1177	Gardner Rd.
1129	Rea Rd.	1178	Underwood Rd.
1130	Modlin Hatchery	1179	Chowan College
1131	Saluda Hall Rd.	1180	Benthal Bridge
1132	Pleasant Plain	1181	Vann Gin Rd.
1133	A. J. Wilson Rd.	1182	Lewistown Rd.
1134	Sears Rd.	1183	Beer Garden Rd.
1135	Chet Rogerson	1184	Saw Mill Rd.
1136	Liverman Rd.	1185	Tri-County Airport
1137	Liverman Mill	1186	Pine Ridge Rd.
1138	Peele Rd.	1187	Holloman Rd.
1139	Lewter Farm Rd.	1188	Collin Rd.
1140	Mc Cuskey Rd.	1189	Shriners Rd.
1141	Menola St. Johns	1190	Albemarle Drive
1142	Flea Hill Rd.	1191	Berkley Road
1143	Britton Rd.	1192	Bruce Farmer Rd.
1144	Blowe Rd.	1193	Daughtry Rd.
1145	Chitty Rd.	1194	J. T. Hall Rd.
1146	Henry Brown Rd.	1195	Claredon Rd.
1147	Menola Baptist Church	1196	Chowan Rd.
1148	Brinkley Rd.	1197	Varsity Rd.

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HERTFORD COUNTY STATE ROAD NUMBERS AND STREET NAMES

1198	Wheeler Rd.	1323	Barham Rd.
1199	Oak Rd.	1334	Sheriff Rd.
1200	Parker Rd.	1335	Lance Rd.
1201	Forest Rd.	1336	Carver Park Rd.
1202	Community College	1337	Rhue Rd.
1203	Landfill Rd.	1338	Washington Rd.
1205	RCCC Rd.	1339	Rose Rd.
1206	West Rd.	1340	Bryantville Park
1207	South Rd.	1341	Spring Branch
1208	Southern Rd.	1342	Murphy Rd.
1209	Corella Rd.	1343	Tarheel Rd.
1210	Pittman Rd.	1344	Eleytown Rd.
1211	Indian Springs Rd.	1345	Brett Rd.
1212	Short Cut Rd.	1400	River Rd.
1213	Old NC 11 Rd.	1401	Elks Rd.
1214	Jones Rd.	1402	Tunis Rd.
1215	Deerwoods Rd.	1403	Ahoskie-Cofield
1216	Shaftsburry Rd.	1404	City Street
1217	Beechwood Rd.	1405	City Street
1218	Industrial Park	1406	City Street
1219	Ridgecroft School	1407	Blue Foot Rd.
1220	Grant Mitchell	1408	Saluda Hall Rd.
1221	Troy Futrell Rd.	1409	Hall Spring Rd.
1222	Taylor Drive	1410	Brinkley Rd.
1223	Hertford County HGH	1411	Brinkleyville Rd.
1224	Garfield Mitchel	1412	Buster Moore Rd.
1300	Wise Store Rd.	1413	Chesterfield Club
1301	Vaughan Mill Rd.	1414	Pettie Shore Rd.
1302	Vaughan Creeck Rd.	1415	City Street
1303	Williams Fishry	1416	City Street
1304	Mapleton Rd.	1418	Arrow Rd.
1305	Harewood Rd.	1419	Newsome Grove Church rd.
1306	Parker Ferry Rd.	1420	Cemetary Rd.
1307	County Farm Rd.	1421	John Moore Rd.
1308	Ebo Rd.	1422	Slaughter Rd.
1309	Hill Ferry Rd.	1423	Whedbee Rd.
1310	Statesville Rd.	1424	Godwin Rd.
1311	Boones Bridge	1425	Vann Rd.
1312	Drewery Rd.	1426	Perry Rd.
1313	Edwin Evans Rd.	1427	Thomas Bridge RD.
1314	Whitley Rd.	1428	City Street
1315	Foushee Railey	1429	Thomas Rd.
1316	Buckhorn Church Rd.	1430	Archer Town Rd.
1317	Spiers Rd.	1431	Archer Rd.
1318	School House Rd.	1432	Big Mill Rd.
1319	Mill Neck Road	1433	Old Ferry Rd.
1320	Brickyard Rd.	1434	Evans Town Rd.
1321	Chowan Beech Rd.	1435	John Thompson
1322	Battles Beach	1436	Baker Town Rd.

APPENDIX C

HERTFORD COUNTY STATE ROAD NUMBERS AND STREET NAMES

1437 Baker Rd.
 1438 Christian Harbour
 1439 Cullen Rd.
 1440 Roundtree Rd.
 1441 Swains Mill Rd.
 1442 Joyner Rd.
 1443 Wiccacon Rd.
 1444 Cedar Hill Rd.
 1445 Bazemore Rd.
 1446 Pritchard Farm
 1450 Pawnee Rd.
 1451 Hare Mill Rd.
 1453 Lincoln Rd.
 1454 VIP Rd.
 1455 Farmer's Chem.
 1456 City Street
 1457 Old US 13 Rd.
 1458 City Street
 1459 Cheyenne Rd.
 1460 Apache Rd.
 1461 Apache Ave.
 1462 City Street
 1463 Poole Rd.
 1464 Stark Jones Rd.
 1465 Cedar Rd.
 1466 Brantley Rd.
 1467 Magnolia Rd.
 1468 Church Rd.

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